Department of the Army
Pamphlet 750–1

LEADER'S UNIT MAINTENANCE HANDBOOK

Headquarters
Department of the Army
Washington, DC
1 February 1994

Unclassified

SUMMARY of CHANGE

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LEADER'S UNIT MAINTENANCE HANDBOOK

By Order of the Secretary of the Army:

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Chief of Staff

Official:

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History. This pamphlet is a revision of this publication. Due to the extensive revision, changed portions have not been highlighted. This publication has been reorganized to make it compatible with the Army electronic publishing database. No content has been changed.

Summary. This pamphlet provides an overview of the wide spectrum of maintenance topics required for day–to–day operations within an Army unit.

Applicability. This pamphlet applies to Active Army, U.S. Army National Guard, and U.S. Army Reserve TOE units and activities, less aircraft.

Proponent and exception authority. The proponent agency for this pamphlet is the Office of the Deputy Chief of Staff for Logistics (DALO–SMM).

Interim changes. Interim changes to this pamphlet are not official unless they are authenticated by the Administrative Assistant to the Secretary of the Army. Users will destroy Interim changes on their expiration dates unless sooner superseded or rescinded.

Suggested Improvements. Users are invited to send any comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to Commander, U.S. Army Ordnance Center and School, ATTN: ATSL–CD–UM, Aberdeen proving Ground, MD 210005–5201.

Distribution. Distribution of this publication is made per requirements on DA Form 12–09–E, block number 4920 provided for command levels A and D for Active Army, Army National Guard, and U.S. Army Reserve.

Contents (Listed by paragraph and page number)

*This publication supersedes DA Pam 750–1, dated February 1989

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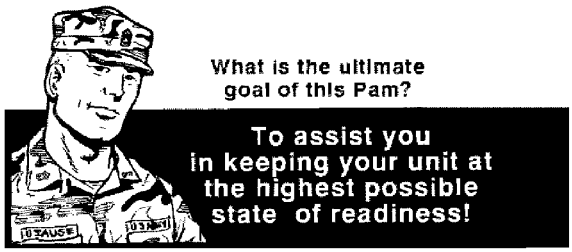
RESERVED

Chapter 1
INTRODUCTION

1–1. PURPOSE

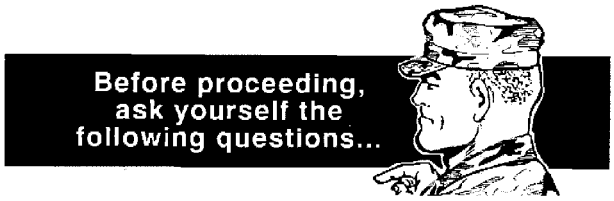
This handbook provides commanders, supervisors, and leaders with a guide for evaluating their unit or activity maintenance operations. It is pocket–sized to carry and use in both field and garrison. It is designed to lead you systematically through your unit maintenance operation; however, each section can be used independently. Start at the beginning and work your way through, or pick the section from the index on the cover which best suits your situation. Either way, the handbook will assist you in determining which areas of your operation require improvement. It will also help you sustain the highest possible materiel readiness.



1–2. LEADERSHIP

Our Army is made up of people, doctrine, organizations, weapons, and equipment. However, it is leadership that brings all these together and makes them work.

Good leaders are developed through a never–ending process of self–study, education, training, and experience.



Have I been in the motor pool or equipment storage area today?

Is maintenance a priority in my unit?

Have I allotted prime training strictly for care, preservation, and maintenance of equipment and maintenance training?

Am I technically competent enough to supervise my soldiers and inspect my equipment?

Do I foster an ownership relationship with regard to equipment?

Do my soldiers have maintenance discipline?

Do I enforce the TM –10/–20 preventive maintenance checks and services (PMCS) standard for my equipment?

Am I taking advantage of the assistance available to me?

Are my subordinate leaders present, and active participants during scheduled maintenance periods?

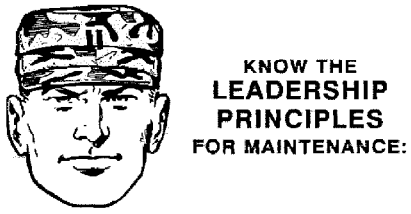
Will my maintenance goals ensure that equipment is complete, 100 percent serviceable, and combat ready?

Are PMCS being properly performed?

Do I review daily transactions and reports?

Are scheduled PMCS and equipment services placed on the unit training schedule?

If you answered "**No**" to any of the questions above, this pamphlet will help you improve your maintenance program.If you answered "**Yes,**" this pamphlet can help you sustain your maintenance program. We've adapted the principles of leadership in FM 22–100 specifically for maintenance. Lead by applying them to your unit.



*. Know your maintenance weaknesses and seek self–improvement.

*. Be technically proficient on your equipment and employ your maintenance operation in a tactically sound manner.

*. Seek responsibility for maintenance; take responsibility for your maintenance actions.

*. Make sound and timely maintenance decisions.

*. Establish realistic maintenance goals that help meet the–10/–20 PMCS standard.

*. Know your soldiers and ensure a safe maintenance workplace.Ensure they are technically and tactically trained.

*. Keep your soldiers informed by involving them in your maintenance planning process.

*. Develop maintenance responsibility and discipline in your soldiers.

*. Ensure maintenance tasks are understood, supervised, and accomplished.

*. Train your maintenance personnel to function as a team.

*. Employ your unit according to its maintenance capabilities.

1–3. UNIT MAINTENANCE

The Army maintenance system consists of four levels: unit, direct support (DS), general support (GS) and depot. Unit maintenance consists of all maintenance performed by operators/crews and mechanics assigned to the unit. This is the foundation of the Army's maintenance system. It is the responsibility of, and is performed by, the using organizations on assigned equipment.

*. Operator level PMCS.

*. Scheduled services.

*. Inspections.

*. Diagnosis and fault isolation to assembly/module level.

*. Lubrication and cleaning.

*. Tightening and minor adjustments.

*. Welding and cutting.

*. Repair by replacement.

*. Recovery.

*. Safety.

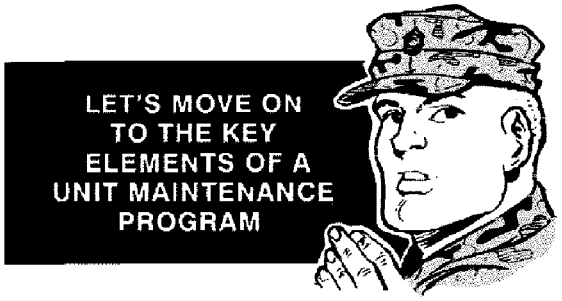
*. Repair parts stockage (Prescribed Load List

*. Army Oil Analysis Program (AOAP).

*. Environmental/hazardous waste.

1–4. MAINTENANCE ALLOCATION CHART (MAC)

The MAC is the primary tool for determining at which level a maintenance task should be performed. It shows the lowest level authorized to perform a specific task. The allocation of maintenance tasks is made on the basis of time, tools, and skills normally available at the location where work is to be done. The MAC is published in the unit –20 maintenance technical manual (TM) for a piece of equipment or as part of a combined category TM. The maintenance categories for unit level are "C"for operator/crew and"O" for unit maintenance.



Chapter 2
Elements of Your Unit Maintenance Program

2–1. PERSONNEL.

a. Equipment Operators/Crew. To have a successful unit maintenance program, you must start with the operator and crew. They must know how to properly operate the equipment as well as detect and report malfunctions. You must establish an ownership relationship between the operators and their equipment. This relationship instills pride and promotes confidence in their equipment. As a leader, you must enforce maintenance discipline by ensuring operator/crew PMCS is performed correctly.

Do they—

Know their responsibility in the overall maintenance system?

Have an ownership relationship with their equipment?

Have appropriate TMs on hand and in use during PMCS and scheduled services?

Take pride in their equipment? Is it kept clean?

Have a license to operate all assigned equipment?

Have the necessary facilities, manuals, tools, and time for maintenance?

Thoroughly understand how to operate and maintain their assigned equipment?

Operate their equipment confident of its reliability?

Properly perform PMCS?

Participate with unit maintenance personnel during services?

Have adequate supervision by technically competent leaders?

Understand the Army maintenance standards in your unit?

Get rewarded for a job well done?

b. Supervisors. Your supervisors provide the leadership link to the operator/crew. They support maintenance discipline by:

(*) Supervising PMCS.

(*) Attending and supervising scheduled preventive maintenance(PM) periods.

(*) Being technically competent.

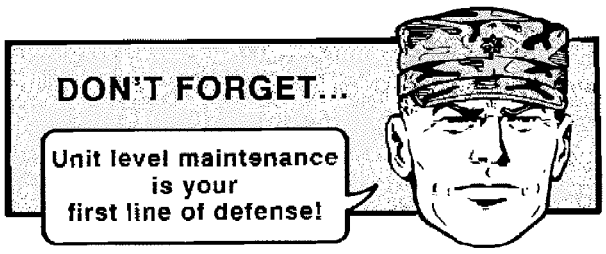
(*) Knowing their responsibilities and unit procedures.

(*) Enforcing the commander's maintenance standards.

(*) Training operators/crews to properly operate and perform PMCS on assigned equipment.

(*) Enforcing safety.

(*) Informing their chain of command when sufficient time is not available to accomplish required equipment maintenance.



c. Unit Maintenance Personnel. Your unit maintenance personnel are your first line of support. They are there to assist you in maximizing your equipment's readiness by properly performing TM –20 level maintenance. Make sure your unit maintenance standing operating procedure (SOP) provides clear guidance to the maintenance platoon/section and its responsibilities. Unit maintenance organizations are basically similar, but the number of personnel authorized will vary depending on unit size and mission.

Study your unit's modification table of organization and equipment (MTOE) or tables of distribution and allowance (TDA) and ensure you know how your maintenance personnel authorizations stack up! We'll use a typical battalion maintenance platoon as an example of how to break out unit maintenance duties and responsibilities.You may not have the same positions, but the responsibilities apply to most units.

The battalion maintenance platoon headquarters contains the command and control elements. It consists of the platoon leader, who is also the battalion maintenance officer (BMO), the battalion maintenance technician (BMT), and the battalion maintenance sergeant(BMS). They ensure the unit maintenance duties of the battalion are accomplished. The duties and responsibilities of your key maintenance personnel should be spelled out in your maintenance SOP.Ensure the descriptions in your SOP match these.

Does the—

BATTALION MAINTENANCE OFFICER (BMO): Control the total maintenance effort of the maintenance platoon?

Establish the maintenance priorities to support the commander's mission?

Provide the commander with accurate equipment status?

Evaluate the unit's PMCS operation?

Enforce the commander's maintenance standards?

Assist the commander in planning tactical maintenance support?

Fully understand materiel and unit equipment status reporting?

Work closely with your supporting maintenance and supply activitie1s?

Continually monitor, recommend changes, and improve maintenance operations?

Ensure sufficient copies of TMs and lubrication orders(LOs) are available to perform PMCS and organizational maintenance on organic equipment?

Does the—

BATTALION MAINTENANCE TECHNICIAN (BMT): Fulfill the role of technical expert for Unit Level Logistics System (ULLS) in the battalion?

Assist the BMO in the performance of his duties?

Organize company/troop/battery maintenance team?

Monitor the scheduling and performance of scheduled services?

Monitor the quality assurance program?

Implement and monitor the unit maintenance safety, warranty, calibration, and oil analysis programs?

Conduct technical training for maintenance personnel?

Assist unit commanders in setting up their PMCS training programs?

Monitor the flow of requests for repair parts and support maintenance?

Coordinate the use of unit recovery assets?

Coordinate requirements for mobile support teams (MST) with supporting direct support units (DSUs)?

Does the—

BATTALION MOTOR SERGEANT (BMS): Assist the BMO and BMT in the performance of their duties?

Assign work to the various sections?

Supervise the scheduling and performance of scheduled services?

Supervise The Army Maintenance Management System (TAMMS)and PLL procedures?

Supervise platoon equipment inventories and control(especially tools)?

Conduct technical training?

Supervise quality control inspectors?

Enforce safety standards within the motorpool?

Maintain the maintenance publications library?

Coordinate the maintenance of garrison maintenance facilities with the installation facilities engineer?

Does the—

COMPANY/TROOP/BATTERY MOTOR SERGEANT/MAINTENANCE TEAM CHIEF: Supervise maintenance and repair to unit equipment?

Coordinate between the battalion maintenance and company/troop/battery headquarters?

Provide technical advice to unit commanders on their operator/crew maintenance training program?

Supervise scheduled services?

Supervise unit recovery?

Supervise oil sampling on unit equipment?

Does the—

EQUIPMENT RECORDS/TAMMS CLERK (may also be the PLL clerk): Have a current copy of the Maintenance Management UPDATE?

Have and understand the user's manual for automated procedures (if applicable)?

Conduct transactions with supply support activity (SSA)daily?

Understand licensing, dispatching, and maintenance records/forms?

Implement TAMMS procedures correctly and accurately?

Cross–train with the PLL clerk?

Does the—

PLL CLERK (may also be the TAMMS clerk): Have current copies of the Maintenance Management and Unit Supply UPDATES?

Have and understand the user's manual for automated procedures (if applicable)?

Understand PLL records/forms?

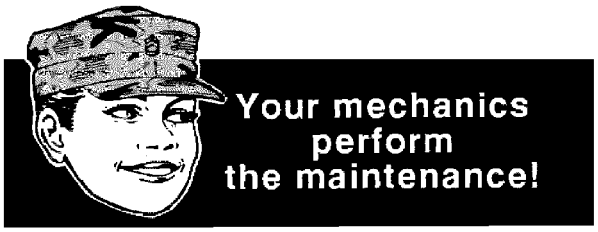
Implement procedures correctly and accurately?

Have current PLL and quick supply store (QSS) lists?

Pick up parts daily from SSA?

Cross–train with the TAMMS clerk?

Conduct transactions with SSA daily?



Are they:

Technically competent/proficient?

Proud of their work and unit?

Thoroughly completing their work?

Organized and functioning as a team?

Using technical publications regularly and properly during services and regular PMCS periods?

Working per the MAC?

Performing inspections and identifying faults per the–10/–20 TM?

Diagnosing the source of problems using the proper tools and test equipment?

Identifying and requesting the correct repair parts?

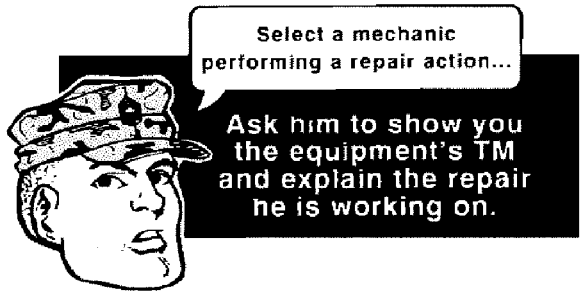
Recording actions accurately on maintenance work sheets?

Improving their technical and supervisory skills?

Keeping the shop area, tools, and so forth, clean and usable?

Spending most of their time at their place of duty?

Safety conscious?



2–2. TRAINING

Training is a command responsibility. The effectiveness of your unit and soldiers is a direct result of their training.Maintenance is training and training is maintenance. Many materials are available to guide your training program.

At the minimum you should be using:

- *. Soldiers' manuals
- *. Leaders' books
- *. Field manuals
- *. ARTEP manuals
- *. SDT manuals
- *. Extension training materials
- *. Training circulars
- *. Technical manuals

There is no single formula for unit maintenance training, but there are three broad objectives for every training program:

INCREASE THE TECHNICAL SKILLS OF YOUR SOLDIERS.

DEVELOP THE SUPERVISORY SKILLS OF YOUR MOST TECHNICALLY COMPETENT SOLDIERS.

MAKE MAXIMUM USE OF SLACK TIMES WITH TECHNICAL TRAINING.

AR 611–201 describes military occupational specialties(MOS) duties for each skill level and career pattern. TC 43–35 was developed specifically for unit level maintenance manager training.
Another important training consideration is management of additional skill identifiers (ASI). Assign personnel with ASIs to areas which let them use their special skills and sustain their training. Some maintenance related ASIs you may have are:

*. C6 – High power radio operator/maintainer
*. D3 – Bradley fighting vehicle system
*. H8 – Recovery operators
*. U2 – Power generation equipment – unit maintenance
*. U6 – Towed artillery mechanic

Cross–training and on–the–job training are two alternatives which help you relieve the burden of personnel and MOS shortages, for example, cross–training personnel to perform recovery and evacuation procedures. Get with your unit training personnel to ensure you conduct and document these training methods correctly.

Take a look at your unit's Army Training and Evaluation Program (ARTEP). Does it contain maintenance, TAMMS, and PLL tasks in simple enough terms to train and evaluate your unit? If it does not, alert your training officer/noncommissioned officer (NCO) and the proponent service school that developed it. In the interim, have your motor officer or maintenance supervisor develop a set of tasks, conditions, and standards to evaluate unit maintenance operations. Don't forget to include operators and crews in this collective training effort. They are your first line of defense! If you answer'No' to any of the following questions, seek assistance to obtain training materials:
Are leaders being trained using the UMMS workshops in TC 43–35?
Are soldier's manuals being used as a guide for training soldiers?
Are trained personnel working in positions as authorized in the MTOE/TDA (to include required ASIs)?
Have local or service school quotas been requested for personnel?
Is maintenance MOS–related training being conducted (using TMDE if applicable)?
Does your unit have a plan for on–the–job training (OJT)and cross–training programs to compensate for personnel or MOS shortages?
Are soldiers trained on progressively more complex tasks?
Is PMCS part of operator/crew training?
Are scheduled maintenance training periods sufficient to conduct thorough training?
Are supervisors required to be present when training is conducted?
Do operators/crews perform accurate PMCS, properly documenting uncorrected faults, which reflect the true condition of their equipment?

2–3. TOOLS

Unit maintenance cannot be accomplished correctly without proper tools. This not only includes MTOE authorized tools but special tools authorized by parts and equipment TMs as well. Check your MTOE and TMs to see what is authorized. Check the status of all authorized tools not on hand with your supply personnel.
Tools must be accounted for, controlled, and maintained. DA Pam 710–2–1 describes toolroom procedures. Consult the reference and make sure you and your soldiers know what to do. Assign accountability with hand receipts. Supply catalogs (SCs) and TMs are now issued with tear–out or reproducible component lists to use as hand receipts. Self–service supply centers (SSSCs) identify the components of sets, kits, and outfits, and tools. Hand receipts and SCs have to be used when conducting inventories.
Accountability and responsibility are two different terms used in supply, but you can be held liable for both. Leaders normally have supervisory responsibility over soldiers signed for property.Know your responsibilities. Basic Policies and Procedures for Property Accounting (AR 735–5) outlines your general requirements.
All personnel are responsible for safeguarding government property. How many losses have you had lately? Too many, and none are indicators of problems. Inventory regularly! If you discover a loss, AR 735–5 tells you what to do.
Give your tool operation a quick assessment:
Are authorized tools on hand or on order? If not, why not?
Are the tools/test, measurement, and diagnostic equipment(TMDE) on hand clean and serviceable? Are they calibrated per TB 43–180?
Are tools secured per AR 735–5?
Are component lists taken from the most current SCs?
Do component lists reconcile with the master hand receipts?
Does the system for tool control work? Who sorts, maintains, and issues special tools and tool sets?
Is a tool locator file on hand?
Can you find a specific tool when you need it?
Do mechanics have to borrow tools that should be in their toolbox?
Select several tool sets at random. Inventory them using the proper component list or SC. Do the same with special tools.Remember, accountability is a supervisor's as well as the hand receipt holder's responsibility.

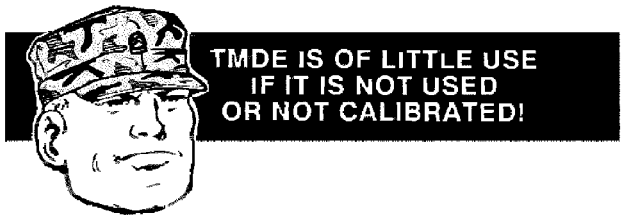
HERE'S A TIP...

Shadowboards and toolset layouts make inventory and control much easier!

When taking over a command or section, do a 100 percent physical inventory of tools. Give special attention to sets, kits and outfits (SKOs). Make sure all toolboxes are inventoried at the same time. Some contain end items such as multimeters which are accountable separately. Otherwise, you may have people sharing tools.

2–4. TEST, MEASUREMENT, AND DIAGNOSTIC EQUIPMENT(TMDE)

TMDE is any system or device capable of being used to evaluate the operational condition of equipment or subsystems, potential malfunctions, or to determine if a part or item is installed within specifications. It identifies and/or isolates any actual or potential malfunction. The accuracy of TMDE will have an effect on the quality of your work.



The regulation covering TMDE, AR 750–43, explains the Army TMDE Calibration and Repair Support Program. It requires units to appoint on orders a TMDE calibration coordinator. Normally, he is located in the unit S–4 or in the communications platoon.
TB 750–25 is the authority on required records and forms. Get a copy and review the uses of:

*. DA Form 2416, Calibration Data Card
*. DA Label 80, U.S. Army Calibrated Instrument
*. DA Label 163, U.S. Army Limited or Special Calibration
*. DA Form 2417, U.S. Army Calibration Systems Rejected Instrument

You should get monthly calibration listings from your TMDE support unit. If you have an item you think needs calibration, but it is not on the list, verify it in TB 43–180.

Some common maintenance related items requiring calibration are:

*. Torque wrenches
*. Hydraulic pressure gauges
*. Simplified test equipment (STE)
*. Multimeters
*. Fuel dispensing meters

Ensure your TMDE is being used and not gathering dust. Have mechanics show you how they use TMDE and follow along with its TM.

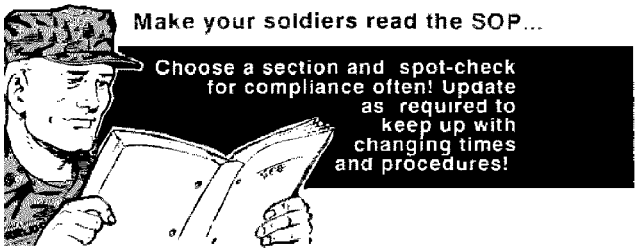
2–5. STANDING OPERATING PROCEDURE (SOP)

SOP and policies are published at almost every level of command to provide detailed guidance on your duties and responsibilities. At a minimum you should comply with the standards of your higher headquarters. However, you may set higher standards and are encouraged to do so.

Maintenance programs must have an SOP!

Upon arrival at your unit, take the following actions:

*. Request copies of your unit and higher headquarter's maintenance SOP.
*. Request a copy of your direct support unit's maintenance SOP.
*. Review and discuss them with your key personnel.
*. Make sure the requirements are tailored to your unit's needs.
*. Be sure all sections are current. Have your maintenance assistance and instruction team (MAIT) or higher headquarters maintenance staff review it and provide comment.
*. Update it as soon as possible. You may have little time after starting your new assignment.
*. See who has adequate updated copies available and request them.



2–6. MAINTENANCE AND SUPPLY PROCEDURES

Maintenance and supply are interdependent. For a smooth–running and effective unit maintenance program, operations must be efficient in both maintenance and supply procedures. DA Pam 738–750 covers the preparation and management of forms and records required to manage maintenance of equipment; control the use of it;and report warranty actions on it. Its counterpart, DA Pam 710–2–1 provides manual procedures for requesting, receiving, accounting for, issuing, and turning–in repair parts and supplies at the using unit level.

a. How the system works. The TAMMS records/forms flow can be confusing. It is crucial that you know how the system works. Perhaps once weekly, pull DA Pam 738–750 off the shelf and spend a few minutes studying one of the forms. Check some of the forms. In time you will have inspected all of the forms and you will have developed a working knowledge of the system.

Many unit maintenance operations have been automated. ULLS is the Army standard computer software for automating unit maintenance operations. ULLS software and its computer hardware differ from unit to unit, but the basic principles of the system are the same.

ULLS automates TAMMS, supply, and some licensing functions. As we describe the manual procedures, we will note the major differences under ULLS.

There are three major types of TAMMS records applicable to unit maintenance.

OPERATIONAL: They provide the information to control operators and equipment and help you plan, manage, and put your personnel and equipment to best use.

MAINTENANCE: These are established to control maintenance scheduling, inspection, and repair work loads. They tell you how to report, ask for, and record repair work. They also help with the status of equipment for readiness, equipment use and logistics reports.

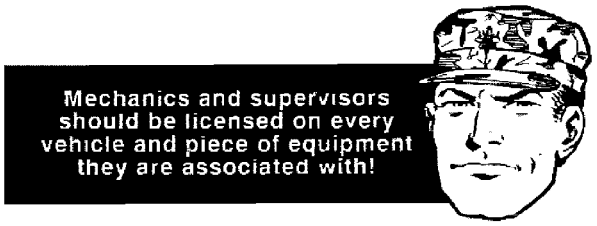
HISTORICAL: These are permanent records that show the receipt, operation, maintenance, modification, transfer, and disposal of equipment.

A good licensing program is the first step in preventive maintenance and can save the life of your soldiers!

(1) *Licensing.* All soldiers must go through a training and licensing process before they become equipment operators. The first step in the process is to screen prospective operators. A review of each soldier's records and an interview are good practices for conducting screening.

An Equipment Operator's Qualification Record (DA Form 348) is maintained on each operator. It is a record of an operator's qualifications, experience, and performance. It is a permanent record, maintained by the unit to which the operator is assigned.The DA Form 348 is also a record of training and must be transferred with the operator when reassigned.

The Motor Vehicle Operator's Identification Card (OF 346) is the Army equipment operator's permit or driver's license. The operator must carry it when operating Army equipment. It is issued to qualified vehicle or equipment operators to identify items and types of equipment they are qualified to operate. Each of your operators must have a valid license.



AR 600–55 provides the basic requirements. DA Pam 750–35, FM 20– 22, FM 21–17, FM 21–305, and FM 21–306 contain more details.

Use the references above and check the following:

Are operators qualified and licensed properly? Reconcile several OFs 346 with DA Forms 348 when you are in the motor pool.

Are OFs 346 reviewed prior to dispatching equipment, after an accident and annualy?

Does the training program include OCONUS operations, adverse weather, and cross–country and night driving, as well as driving in a NBC environment?

Is the training program supported by the unit's leadership?

Does the program include testing the operator's ability to perform PMCS and identify safety faults per the safety regulation covering the prevention of motor vehicle accidents (AR 385–55)?

Does the program require remedial training for substandard performance?

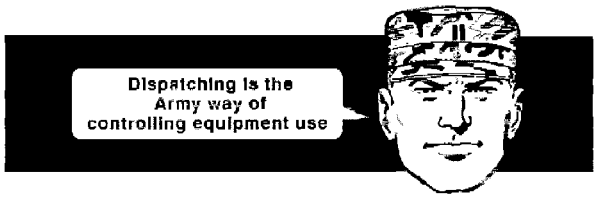
Does the program include instruction on power generation equipment operation?

Is battlefield damage assessment and repair (BDAR)addressed?

OFs 346 and DA Forms 348 must agree!

2. Dispatching A thorough vehicle dispatch process is part of a quality maintenance program. It ensures equipment is operationally ready before being dispatched, and will establish an audit trail on

operators and equipment. Every leader should follow and check the dispatch procedures.



Evaluate your dispatch process:
Is the dispatcher appointed on orders per DA Pam 738–750?

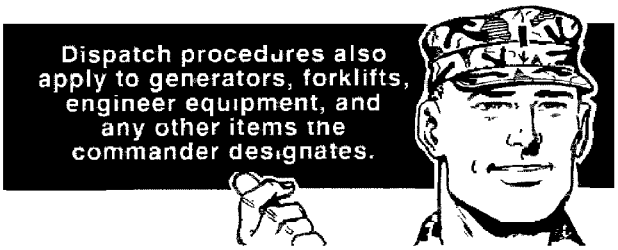
(-) Is an operator assigned to each vehicle and piece of equipment?

(-) Is the equipment mission capable in accordance with the –10 manual?

(-) Is a service or AOAP sample due on the equipment?

(-) Does the dispatcher inspect the operator's OF 346?

ULLS performs the above checks automatically!



(-) Is the equipment suitable for the mission for which it is dispatched?

The operator/crew performs a 'before operations' check using appropriate TMs and DA Form 2404.

(-) Does the operator use the –10 TM?

(-) Are faults being corrected and not recorded?

(-) Are Basic Issue Items (BII) on hand and being used (if required)?

(-) Are local safety requirements being met? (Especially outside Continental United States

Supervisors spot–check before dispatching.

If no deficiencies are noted, the dispatcher makes entry on Organizational Control Record for Equipment (DA Form 2401), and gives the operator the Motor Equipment Utilization Record (DD Form 1970), after making appropriate entries.

ULLS does the same but on computer printed formats.

During the mission, 'during operations' PMCS are performed.

(-) Operator's TMs.

(-) Operator's SF 46 or OF 346.

(-) DD Form 1970 or preprinted ULLS form.

(-) Records folder w/equipment ID card.

(-) Accident report form (SF 91).

(-) Accident Identification Card (DD Form 518).

(-) Map or strip map (if appropriate).

(-) First aid kit.

(-) Warning triangle.

(-) Fire extinguisher.

(-) BII/additional authorized list (AAL) items.

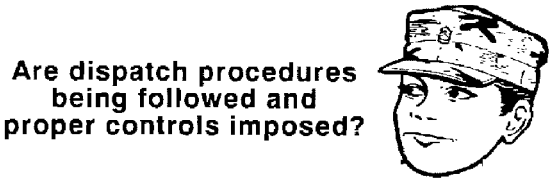
After the mission is completed, return to the motor pool and perform –10 TM "after–operations" checks.

(-) Faults corrected if possible?

(-) Actions from SOP completed, that is, fuel tanks topped off and vehicle cleaned?

(-) Miles/hours, fuel/oil and other DD Form 1970 entries completed?

Return DA Form 2404 and equipment records folder to the dispatcher. The dispatcher notes any further actions needed and closes out the entry on DA Form 2401.



ULLS records all faults(to include DA Form 2408–14) on DA Form 2404.

3. TAMMS/PLL crossroads.

Here is the way the DA Form 2404 feeds into and depends on other TAMMS/PLL forms and records:

*. When an operator finds a fault that does not place the equipment in a not mission capable (NMC) status and does not require parts for repair (for example, a fender is dented), the TAMMS clerk simply takes the DA Form 2404 and checks it against the DA Form 2408–14, Uncorrected Fault Record, and annotates the fault on the form. It the fault is already posted on the DA Form 2408–14, there is no need for the operator to report the fault. This type of fault is usually corrected during the next scheduled organizational maintenance service for that equipment.

*. Another operator turns in a DA Form 2404 with a fault which does not place the equipment in an NMC status, but which requires parts for repair.

(-) The TAMMS clerk checks the DA Form 2408–14 to see if the fault was previously noted. If it was, he will copy the corrective action onto the DA Form 2404. If the fault was not previously entered, he will give the DA Form 2404 to the maintenance supervisor/motor sergeant. A mechanic should then be assigned to research the necessary parts information and submit it to the PLL clerk to be requested. The new uncorrected fault would now be entered on the DA Form 2408–14, or into ULLS.

(-) The PLL clerk checks the unit PLL listing.

(-) If the item is on hand, he issues the part to the mechanic and requests replenishment from his SSA. The mechanic installs the part, annotates the DA Form 2404 to reflect the corrective action, and initials the "corrected by"column of the DA Form 2404. When the mechanic's supervisor checks his work, the supervisor initials the symbol in the status column of the DA Form 2404. The uncorrected fault now becomes a corrected fault and the TAMMS clerk closes out the entry on the DA Form 2408–14, or on the ULLS.

(-) If the PLL clerk does not have the item (it is either 0–balance or a nonstocked item), he fills out a Request for Issue(DA Form 2765–1), assigns it a document number, and annotates the Document Register for Supply Actions (DA Form 2064). He then gives

this number to the TAMMS clerk who annotates it on the DA Form 2408–14. When the item is received by the PLL clerk from the SSA, the maintenance supervisor/motor sergeant will assign a mechanic to install the part. When the part is installed and the motor sergeant has inspected the work, the DA Form 2408–14 and DA Form 2404 are annotated per DA Pam 738–750. ULLS automation makes this process simpler and faster.

Note. Spot–check your equipment's deferred maintenance parts needs by cross–referencing the DA Form 2408–14 document numbers against those in the document register to ensure they are valid.

*. A third operator turns in a DA Form 2404 showing a deficiency which places the equipment in an NMC status which requires a part for repair. When the DA Form 2404 shows a deficiency(a fault rendering the equipment NMC), the same steps are followed as a fault which does not put the equipment in an NMC status, with these differences:

(-) When only parts are required:

(-) The part must be ordered using urgency of need designator(U-ND) 'A' and the commander or his designated representative must initial the document register.

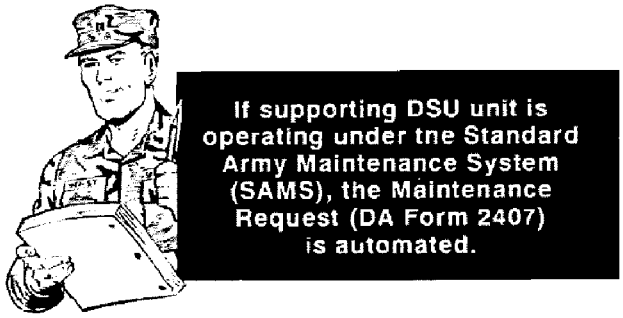
(-) The TAMMS clerk can not enter an uncorrected NMC fault on the DA Form 2408–14. When the document number comes to the TAMMS clerk, he prepares an Inoperative Equipment Report (IER) (DA Form 5409) and Unit Level Deadlining Parts Report (ULDPR) (DA Form 5410)per DA Pam 738–750. These forms inform your support maintenance/DSU of urgent support requirements.

He must also annotate the Preventive Maintenance Schedule and Record (DD Form 314). Information from the DA Form 314 is used to update the DA Form 2406.

The DA Form 2406 is used for reporting equipment status to the commander and through DA level. It also provides input to the USR. For its use, see AR 700–138.

When an NMC fault requires repairs above your unit's capability, the Maintenance Request (DA Form 2407) is used.

The TAMMS clerk prepares a DA Form 2407 requesting assistance from your DSU.



The unit maintenance personnel correct all unit level faults and present the equipment to the DSU technical inspection section. The equipment is assigned a work order number and accepted by the DSU for repairs. The receipt copy of the DA Form 2407 is then given back to the unit as a hand receipt for the equipment or record of an active work order at the DSU. The work order number is used to track the status of repairs of the equipment at the DSU.

(-) The TAMMS clerk transcribes the work order number to the DA Form 2406 and the NMC days onto the DD Form 314.

(-) When the job is completed, the receipt copy of DA Form 2407 is given back to the DSU and the organization copy of the DA Form 2407 is returned along with the equipment and filed at the unit for at least 90 days as a record of maintenance performed by the DSU.The support not mission capable supply (NMCS)/not mission capable maintenance (NMCM) time is listed on the front of this copy.

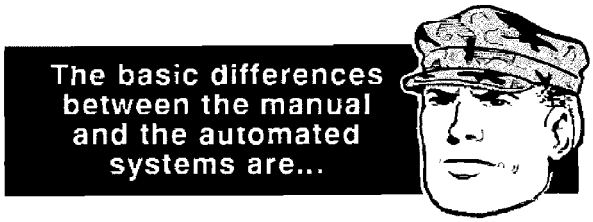
(-) This NMCS/NMCM data is then transcribed by the TAMMS clerk to the DD Form 314.

Requirements for Supply Below the Wholesale Level (AR 710–2) and guidance on the Using Unit Supply System Manual Procedures (DA P 710–2–1) found in the Unit Supply UPDATE provide information on the operation of a PLL. The following is a brief explanation of how a PLL is operated:

A PLL is designed to carry a 15–day supply of essential repair parts determined by Department of the Army and the unit's demand history. Three demands (Three requests for any quantity) in 180 days qualify an item to be stocked on PLL (one year for Reserve Components) if the essentiality code is "C"and maintenance code is "0" on the Army Master Data File(AMDF). After reviewing the unit's demand history for the previous 180 days, you should determine whether an item is critical to the mission; and can then request its addition to PLL. If an item is contained on the unit's mandatory parts list (MPL), it is part of your PLL and cannot be deleted. In order for a non–MPL item to remain on a unit's PLL, one demand must be registered each 180 days (one year for Reserve Components).

Currently, there are different automated supply accounting systems (such as ULLS and Division Logistics System DLOGS) in use throughout the Army. This pamphlet cannot cover all of them. However, the basic PLL operations will vary only slightly. The differences between systems are in the frequencies and formats of information provided on various printouts received by the unit.

The automated unit level supply system provides management information to the commanders who manage PLLs.



DA Form 2765 is replaced by computer diskettes.

The document register is stored in the computer.

The status file is found on the document register.

Updates are done automatically by the system by exchanging diskettes with your DSU or transmitting data over secure wire or FM radio.

Vehicle parts requisition status is automatically upgraded as changes come in from the supply support activity (SAA).

Record of Demands–Title Inserts (DA Form 3318) are no longer required.

Here are some important checks which will help you with your PLL:

Is the PLL listing accurate and up–to–date?

Are stock locations and quantities shown on the PLL listing correct?

Do balance on–hand plus quantity due–in equal authorized stock quantity?

Are all zero–balance lines on valid requisition with the correct priority, that is, urgency of need designator (UND) B for only that quantity used that brought the item to zero balance?

Are follow–ups submitted on items when status is not received within 14 days (5 days for ULLS users) on priority 01–08 requisitions?

Is a current copy of the MPL on hand for TOE units?

Is a current copy of the Unit Supply UPDATE on hand?

Is a current copy of the AMDF available?

Are stock locations accurately marked?

Are repair parts protected and stored properly, securely?

Has the commander taken appropriate actions to approve changes, additions, or deletions reflected on the PLL change listing?
Has your PLL been given a physical inventory each review period (90 days for Active Army, 180 days for ARNG/USAR)?
Are excess parts cleaned, tagged, and turned in promptly and properly?
Are cancellations submitted immediately when parts are no longer required?
Is the document register neat and accurate?
Has the CO or designated representative signed the document register for high priority requests?
Limited access roster posted?
If you have been able to get satisfactory answers to the questions so far, your PLL is probably in good shape. Your interest and ability to check the major elements of the PLL will go a long way in assuring its efficiency. If you are having PLL problems, your SSA and MAIT as described in Chapter 3 are there to assist you. Use them!

2–7. ARMY OIL ANALYSIS PROGRAM (AOAP)

The AOAP is preventive maintenance. The oil analysis program detects potential equipment component failure and identifies lubricant condition through evaluation of your equipment's oil samples. Make sure your unit is supporting the AOAP with proper sampling procedures and prompt submission of samples. A well–run AOAP can save your unit oil, parts, and labor, which equal money.

THE AOAP CYCLE

1. Identify AOAP equipment in DA Pam 738–750. Fill out an Oil Analysis Log (DA Form 2408–20) or ULLS entry for each component.

2. Schedule sampling dates on DD Form 314.

3. Obtain sampling supplies.

4. Take an oil sample and annotate on DA Form 2408–20.

5. Fill out the label on the oil sample bottle; then place your oil sample into the plastic bag, and insert it into the shipping sack or box along with your Oil Analysis Request (DD Form 2026).

6. Accurately fill out the DD Form 2026 and get sample to the lab as soon as possible (ASAP).

7. When the lab analyzes the sample, one of two things will happen:

(-) They will return your DD Form 2026 stating results are normal. If so, you will file the 2026 and annotate DA Form 2408–20.

(-) They will quickly inform you on an Oil Analysis Recommendation and Feedback form (DA Form 3254–R) of any suspected problems, and indicate which actions need to be performed. If DS maintenance actions are required, send a prepared DA Form 2407, DA Form 2408–20, and DA Form 3254–R to support, along with the equipment. Support maintenance will annotate the forms, indicating the actions taken. (ULLS will automatically print out the automated versions of these forms in duplicate, when needed.)

8. The cycle continues from this point.

More detailed policies, procedures, and guidance can be found in DA Pam 738–750.

2–8. READINESS REPORTING

Readiness reports are management tools, not just more paperwork. Commanders use information on materiel and unit readiness reports to analyze, predict, and make decisions on your unit's ability to perform its mission. The reports are completed both during peacetime and combat, and are useful only if they are timely, accurate, and complete. Materiel readiness is the capability of equipment or systems to accomplish their missions. Materiel Condition Status Report (MCSR) (DA Form 2406), Unit Status Report(USR) (DA Form 2715–R), Missile Readiness Report (DA Form 3266–1), and Army Aircraft Inventory, Status, and Flying Time (DA Form 1352)are the most useful tools available to you to assess your readiness.

a. DA Form 2406. The DA Form 2406 provides a standard format for reporting the condition of your equipment! Army Logistics Readiness and Sustainability (AR 700–138) provides detailed instructions for the preparation of DA Forms 2406.

DA Form 2406 provides you with:

(*) Equipment status information for planning day–to–day operations.

(*) Information on work load, density, and availability of equipment.

(*) A worksheet for computation of equipment status on DA Form 2715–R.

The back of the 2406 is the most useful part of the form for unit leaders. Some commanders even require their maintenance section to fill out the back on a daily basis, so NMC equipment gets visibility and managerial attention. Equipment deadlined for administrative or safety reasons are also noted in some commands.

Look at the items reported and ask the following questions:

Has any of the equipment listed been deadlined for an extended period?
Is any item, deadlined over 7 days, receiving intensive management (require daily updates if necessary)?
Is your DSU doing everything possible to assist you?
If repair parts were ordered, was the interval between the date the item was identified and the date of the parts request greater than one working day?
Are maintenance managers checking follow–ups and status cards?
If the item was job–ordered to support maintenance, was the interval between the date the item was identified and the date it went to support maintenance greater than three working days? It should not be if your equipment is being maintained per the –10/–20 TM. Find out why!
Have any items been in support maintenance more than one working week? (If yes, require a follow–up and explanation.)
If there are delays in receiving parts that were ordered, have you contacted the local AMC LAO and/or the appropriate MSC LAR for assistance.

Look at the front side of your monthly DA Form 2406. The front contains a recap of your equipment availability over the last month (quarter for Reserve Components). Data for the equipment portion of the DA Form 2715–R is taken from the DA Form 2406 per Unit Status Reporting procedures (AR 220–1), so you should give it a thorough going over to ensure accuracy. Here are some quick checks:

(*) Check firsthand to ensure the old 'M–1 Pencil' isn't doing your mechanic's work. Check random DA Forms 2404 against the DD Form 314 entries.

(*) Choose a specific model of equipment and compare the authorized quantity with the MTOE. (Don't forget to count items that make up a system.) If a part of a system is NMC, the whole system is NMC. Check Table B1 of AR 700–138 against your MTOE equipment line item number (LIN) to see if you have a system you must account for.

(*) Compare the on–hand quantity of a single model to the number of DD Forms 314. (Do not forget to watch out for substitute line–items.)

(*) Check the report period to verify the possible days.

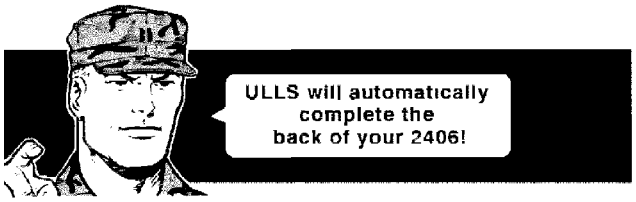
(*) Add up the nonavailable days from the DD Forms 314 and subtract from the possible days to verify available days.

(*) Ensure the nonavailable days are divided correctly into supply and maintenance for both unit and support maintenance.

(*) Compare these to your daily 2406, DA Forms 5409/5410, and

file copy DA Form 2407s. ULLS provides the same reports. Commanders should compare.

(*) Require valid explanations for any difference.



If your DSU is automated with the SAMS, you can request automated reports from them to double–check your 2406. Ask for:

(*) Equipment Deadlined Over XXX Days by Unit (AHO 003).

(*) Equipment Deadlined Over XXX Days by Battalion (AHO 026).

(*) Customer Work Order Reconciliation (AHN 004).

The equipment deadlined reports can be requested to cover a company–sized unit or battalion for as many days as you like. Select the report period for your DA Form 2406 and it should provide a roll–up to match your back–side 2406.

The customer reconciliation report lists all work orders the maintenance company has open for your unit. It contains NMCS and NMCM time.

Again, if there are discrepancies, find out why! ASK QUESTIONS!

b. DA Form 2715–R. All completed USRs are classified at least 'CONFIDENTIAL.'If you have the security clearance and the 'need to know,' get AR 220–1 and review your unit's computations.

*If the computations do not compare favorably, find out what's wrong!

In arriving at your training data figures, did you consider:

Your unit maintenance performance during your most recent readiness exercise or ARTEP?

Availability of maintenance leadership?

Maintenance training requirements/shortfalls?

If you need help, let your USR say so!

Commanders decide the overall readiness status based on their observations, statistical data, and personal judgement.Encourage honesty and be alert! Numbers alone can inflate your rating over what you know is true.

2–9. FACILITIES

Shop organization is key to the efficiency of your unit maintenance operation. Inadequate facilities or inefficient layout cause wasted time which leads to low morale and deterioration in readiness.

FM 43–5 covers tactical maintenance operations at the unit level.

Naturally, field operations are considerably more harsh than garrison. However, organizing your field operations can go a long way toward easing the burden. Make certain all authorized tools are included in your loading plans. Too often, maintenance is not performed because equipment was left in garrison.

Always recon an area prior to moving in. Anticipate bottlenecks and spread out to avoid congestion. Once you are set up and operating, it is frustrating, difficult, and time–consuming to readjust.

*. Be centrally located near a good road and accessible by supported equipment.

*. Be suitable for technical operations.

*. Be near a main supply route (MSR).

*. Have internal and external road network to support your equipment.

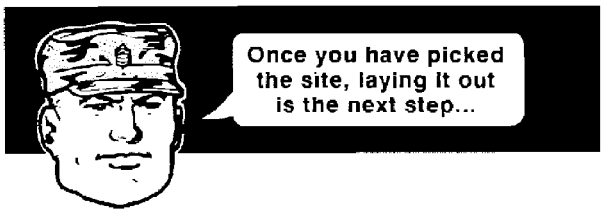
*. Have a hard stand or buildings available.

*. Have adequate drainage for hard rains.

*. Be large enough to disperse equipment.

*. Be defendable with what you have.

*. Provide adequate cover and concealment.



Make sure you:

*. Enforce one–way internal traffic.

*. Route nonmaintenance traffic around the area.

*. Camouflage the area.

*. Have an area for vehicles and operators/crews awaiting Maintenance.

*. Establish a security plan and practice sound tactics.

*. Separate parts, supplies, work, sleep, maintenance, and inspection areas.

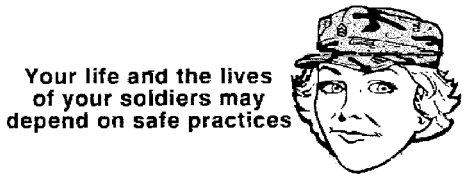
Garrison organization should be similar when possible. Remember, we train in peace as we will fight in war, and maintenance is training!

Work bays may be used to perform all services on a vehicle or for maintaining particular parts of a vehicle. For example, there may be a bay for servicing wheels and brakes, another bay for engines and accessories, or bays may be assigned as required.

The following questions can get you started:

Are shop sections and parking areas organized to make maximum use of available space?
Is the lube area used? Are sufficient lube materials(grease guns, oil cans, and so forth) available and protected to prevent contamination?
Is there an adequate vehicle washing facility? Well drained?
Are there separate paint and petroleum, oils and lubricants(POL) storage areas?
Are parking areas set aside for vehicles awaiting parts, maintenance, and inspection? Are they secure?
Are showers, lockers, and latrines convenient?
Is environmental control adequate?
Are the shop bays and administrative and equipment storage areas neat, functional, and organized?
Are current publications available and accessible?

Clean as you work, and try to devote the day's last 15 to 30 minutes to completely cleaning the area!



2–10. SAFETY

Leaders must enforce stringent safety standards for performing maintenance. Maintenance–related accidents are responsible for 20 percent of all military on–duty injuries.Accidents reduce a unit's effectiveness, impact adversely on morale and discipline, and degrade operational capabilities.
The main objective of all unit safety programs is accident prevention, and safety awareness is the starting point for accident prevention. Be safety conscious.
Frequent inspection of the motor pool is a must if you are to have a safe maintenance program. A dirty, disorderly shop is your first indicator of unsafe maintenance operations! Develop a safety inspection checklist and tailor it to your unit's operations. The following questions will help get you started:
Is there an appointed fire marshal and safety officer? Are they on orders? Are their duties specified in the SOP and do they accomplish them?
Is there a safety bulletin board with fire regulations? Are your fire and safety SOP and evacuation plans posted?
Is there a clear, well–understood accident reporting system? Are smoking areas designated and used?
Are there ample fire extinguishers? Are they maintained and inspected monthly? Are they the correct type?
Are approved cleaning materials used (gasoline and diesel fuel are never used for cleaning)?
Are all vehicles being worked on "chocked"? Are properly rated and approved jack stands used?
Are safety markings and color codes properly used?
Are vehicle pits designated (covered or roped off)?
Are safety regulations on hand, read, and understood, and periodically reviewed?
Are gas cylinders properly color–coded and equipped with the correct valves and fittings? Are the cylinders stored away from other flammables?
Are oxygen and acetylene storage areas separated by 50 feet?
Are paint and welding rooms fireproof and vented? When these functions are performed outside, are proper shielding and safety measures taken?
Is a tire inflation cage used along with a ten–foot extension hose?
Are lead acid batteries being stored, filled, drained, and charged/recharged in a properly ventilated facility? Is protective clothing provided and marked clearly and used by personnel?
Are hazardous areas marked with appropriate signs (hearing protection, goggles, aprons, and so forth)? Are those protective items available, serviceable, and used?
Are all personnel trained per the Federal Hazard Communication Training Program?
Are emergency phone numbers prominently displayed?
Are POL products properly disposed of?
Are proper tools being used?
Are grounding rods used when working around generators, fuel, and battery operations?

A safety board mounted with protective items such as goggles, first aid kit, fire extinguisher, and so forth, is a good idea.
Have lifting devices and jack stands been inspected and load tested?
Is the capacity property marked per the guidance found in TB 43–0142 ?
Are ground guides used (particularly when backing)?
Are floors clean and reasonably free of oil, grease, sawdust, and so forth?
Are cleaning materials, rags, mops, brooms, and dry–sweep available? Are they properly stored?
Most of these checks apply to both garrison and field operations. In the field, continuous operations will increase the probability of fatigue and stress–related incidents. Extreme weather conditions with special clothing requirements (NBC and cold weather uniforms) may also have negative impacts on safety. Be alert and check your soldiers often.

2–11. RECOGNITION

Equipment operators, crews, and maintenance personnel are often overlooked when it comes to awards for a job well done!

AR 672–5–1 specifies that any commander (LTC or higher) can award driver and mechanic badges, with appropriate bar(s), to persons who demonstrate a high degree of ability in equipment operation or mechanical maintenance. Check your unit's awards program:
Is there an incentive program for driver's/mechanic's badges in your unit?
Are letters and certificates of appreciation and commendation given to truly outstanding operators/crews?
Are there internal competitions for safe driving or duty days without maintenance injury?

Institute an awards program if you don't already have one!

2–12. PUBLICATIONS

With command distribution, you get publications and forms through local distribution channels. Review your unit's publication accounts periodically.

When you review your unit's publications account with DA Pam 310–10, see if the:

*. Units DA Form 12 series lists a publications request for each type of equipment you have on hand.

*. Right people are reviewing the forms. The operators and mechanics know what they need.

*. Quantity is sufficient for the units needs. Have as a minimum:

(-) One –10 series TM and one LO per piece of equipment.

(-) One TB, if required, for each piece of equipment.

(-) One –10 and one of each –20 series TM and LO for each three assigned mechanics, and one for review by TAMMS/PLL CLERK, BMS, BMT, and BMO (to include parts/'P' manuals).

*. DA Form 12 series has been reviewed recently. Forms should note name of the reviewer and date reviewed, and should be done at least semiannually.

*. Publication changes are posted promptly. Internal distribution system is getting the right manuals to the right place promptly. (Ask the pubs clerk how publications are distributed.) The method should be clear!

*. Rescinded and superseded publications are removed. Pull a few manuals off the shelf from various equipment sections and check them against DA Pamphlet 25–30.

If you are using your publications properly, you should have a continuous process of ordering new publications to replace old, worn–out ones!

Here are some pubs you should have in your library:

Table
ARMY REGULATIONS (AR)

The Army Information Resources Management Program	AR 25–1
Military Convoy Operations in CONUS	AR 55–29
Management, Acquisition, and Use of Administrative Motor Vehicles	AR 58–1
Motor Vehicle Traffic Supervision	** AR 190–5
Security of Army Property at Unit and Installation Level	AR 190–51
Unit Status Reporting	AR 220–1
Army Training	AR 350–1
Army Safety Program	AR 385–10
Safety Color Code Markings and Signs	AR 385–30
Accident Reporting and Records	AR 385–40
Prevention of Motor Vehicle Accidents	AR 385–55
Fire Protection	AR 420–90
Motor Vehicle Driver and Equipment Operator Selection, Training, Testing, and Licensing	AR 600–55
Enlisted Career Management Fields and Military Occupational Specialties	AR 611–201
Selection of Enlisted Soldiers for Training and Assignment	AR 614–200
Military Awards	AR 672–5–1
Army Accident Prevention Awards Program	AR 672–74
Logistic Assistance Program	AR 700–4
Issue and Sale of Personal Clothing	**AR 700–84
Army Logistics Readiness and Sustainability	AR 700–138
Army Warranty Program Concepts and Policies	AR 700–139
Reporting of Product Quality Deficiencies Across Component Lines	AR 702–7
Supply Policy Below the Wholesale Level	**AR 710–2
Policies and Procedures for Property Accountability	AR 735–5
Army Materiel Maintenance Policy and Retail Maintenance Operations	*AR 750–1
Modification of Materiel and Issuing Safety–of–Use Messages	AR 750–10
Army Test, Measurement, and Diagnostic Equipment Program	AR 750–43

Table
DEPARTMENT OF THE ARMY PAMPHLETS (DA PAM)

Code Reference Guide for Army Master Data File (AMDF)	DA Pam 18–1
Consolidated Index of Army Publications and Blank Forms	DA Pam 25–30
The Standard Army Publications System (STARPUBS)	DA Pam 310–10
Unit Safety Management	DA Pam 385–1
Using Unit Supply System Manual Procedures	**DA Pam 710–2–1
Supply Support Activity Supply System Manual Procedures	**DA Pam 710–2–2
Unit Commander's Supply Handbook	DA Pam 710–5
Functional Users Manual for the Army Maintenance Management System	*DA Pam 738–750
U.S. Army Equipment Index of MWO'S	DA Pam 750–10
Functional Users Guide for Motor Pool Operations	*DA Pam 750–35

Table
FIELD MANUALS (FM)

Petroleum Supply Point Equipment and Operations	FM 10–69
Vehicle Recovery Operations	FM 20–22
Driver Selection, Training, and Supervision, Track Combat Vehicles	FM 21–17
Visual Signals (for Tracked Vehicles)	FM 21–60
Manual for the Wheeled Vehicle Driver	FM 21–305
Manual for the Track Combat Vehicle Driver	FM 21–306
Unit Maintenance Operations	FM 43–5
Army Motor Transport Units and Operations	FM 55–30
Military Convoy Operations in the Continental United States	FM 55–312

Table
TECHNICAL BULLETINS (TB)

Safety Inspection and Testing of Lifting Devices	TB 43–0142
CARC Spot Painting	TB 43–0242
Calibration and Repair Requirements for the Maintenance of Army Materiel	TB 43–180
Procedures for Selection, Training, Testing, and Qualifying Operators of Equipment/Systems	TB 600–1
Maintenance of Supplies and Equipment: Army Test, Measurement, and Diagnostic Equipment Calibration and Repair Support Program	TB 750–25
Use of Antifreeze Solutions, Antifreeze Extender, Compounds, and Test Kit in Engine Cooling Systems	TB 750–651

Table
TRAINING CIRCULARS (TC)

Unit Maintenance Management System (UMMS)	TC 43–35
Tactical Wire and Cable Techniques	TC 24–20

Table
TECHNICAL MANUALS (TM)

Rigging	TM 5–725
Machine Gun, 7.62–mm, M60 W/E; Mount, Tripod, MG,7.62–mm, M122	TM 9–1005–224
Principles of Automotive Vehicles	TM 9–8000
Customers (Users) Procedures for DS4	TM 38–L32–11

Table
MISCELLANEOUS (MISC)

User manuals for ULLS, SARSS, and SAMS	AS REQUIRED

Notes:

*This publication located in the Maintenance Management UPDATE.

**This publication located in the Unit Supply UPDATE.

For **OCONUS** organization, you may also need local regulations that apply to your particular area.

Chapter 3
Maintenance and Supply Assistance.

3–1. EXTERNAL SUPPORT

Effective maintenance support of materiel combines the maintenance program of your unit and your supporting maintenance and supply activities. Your supporting activities must maintain a good liaison to assist your unit in accomplishing its maintenance management responsibilities (AR 750–1). You must know what technical assistance they can provide to maximize your available resources-.Their SOP will tell you what and how they support. Get copies and discuss them with their key personnel.

Do you have current copies of your supporting activities'SOP?

Do you comply with their provisions?

Have you toured your support's facility?

a. Maintenance Support. When a piece of your equipment fails and is beyond your unit's capability to repair, it is work–ordered to your supporting maintenance activity for repair.

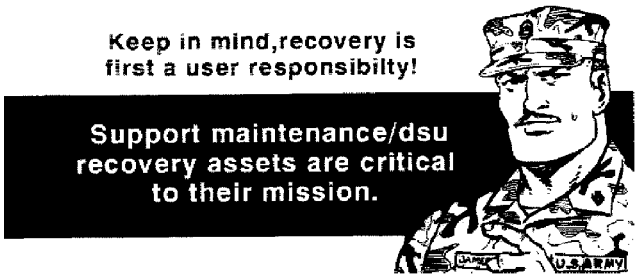
Your maintenance personnel normally deal with the shop office.They bring items to be repaired to the support maintenance inspection area with a completed DA Form 2404 and DA Form 2407.Their SOP tells you how they process your maintenance request.

Is your equipment often rejected by the support maintenance inspection section? For what reasons? The inspectors at the support maintenance unit can tell you a lot about the condition of your equipment as well as how well your unit follows their SOP.

Are you notified when repaired equipment is not picked up promptly?

DS maintenance units (Active Army) often repair equipment onsite through the use of maintenance support teams (MSTs). The principle is "*repair as far forward as possible.*"MSTs can save you a lot of nonoperational time!

Does your maintenance section consider and request recovery support from the supporting maintenance unit or DSU?



Being able to answer "**YES**"to the following questions lets you know that you have a firm liaison on which to establish an effective maintenance program.....

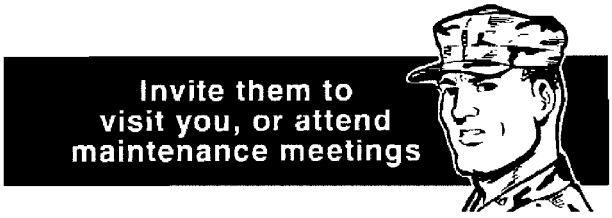
Do you visit your supporting maintenance activity/support operations office regularly?

Do you know these key maintenance support personnel?

- *(-)* Support operations officer (divisional units)?
- *(-)* Company commander?
- *(-)* Shop officer?
- *(-)* Automotive, armament, supply technicians?
- *(-)* Shop noncommisioned officer in charge (NCOIC)?
- *(-)* Inspection section supervisor?

Try to make a visit at least weekly, and before the DA Form 2406 rush. Your personal interest will have a positive impact on your supporting maintenance unit or DSU!

Do representatives from the supporting maintenance unit visit your unit regularly?



Have you considered asking your support maintenance/DSU commander for assistance in your maintenance training program by conducting a technical inspection of your equipment?

Do you provide your support maintenance/DSU a copy of your 2406? Do they use it as a management tool?

Are your Delegation of Authority (DA Forms 1687) current, on hand, and used by the shop office?

3–2. SUPPLY SUPPORT

Your SSA maintains a quantity of fast–moving repair parts to satisfy your PLL requirements. Quantities stocked are based on demand history much like your PLL.

a. Tech supply office (TSO). The TSO receives your PLL replenishment and "as required"parts requests. Requests get a technical edit, are bounced against stock records, and if the stocks are on hand, parts are issued. If not, a due–out is established to you and a requisition is passed to the next supply level.

When you visit your SSA, stop by the tech supply office and talk to the tech supply officer. Go over the status of some of your high–priority requests. Ask the TSO if...

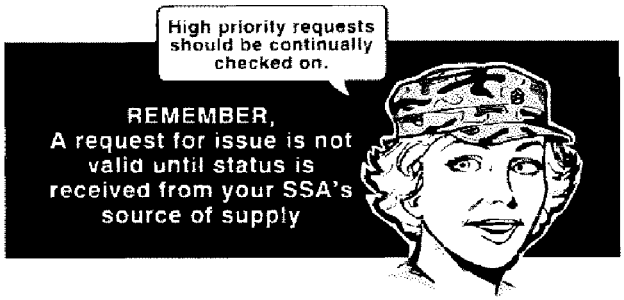
Your unit has a designated bin in which parts are placed.

Does your unit clear its bin out daily? Failure to do so is a constant problem. Walk by the bin when you visit; see how long the parts have been there. More than a day or two is too long.

Are your requests submitted and prepared properly?

Monthly reconciliations are being conducted on time and completed properly.

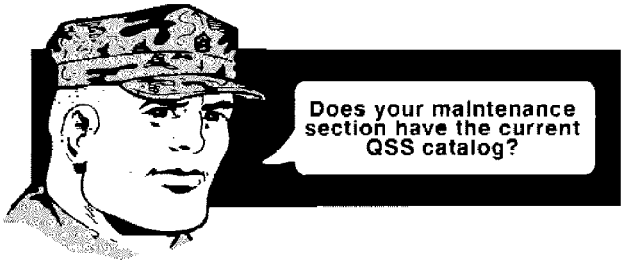
DA Forms 1687 are current, on hand, and used. If not, see DA Pam 710–2–1.



b. Repairable Exchange (RX). The RX system expedites the exchange of designated unserviceable repairable parts, components, modules, and assemblies on a "one–for–one"basis. DA Form 2765–1 is used to exchange selected repairables. If components are missing or the item is unserviceable due to other than fair wear and tear (FWT), follow the procedures in AR 735–5.

Ask the TSO to explain the flow of repairables to and from the repair activity where they are repaired. You may find items you were throwing away are RX. Check to see if any items are awaiting pickup by your unit. How long have they been there? Anything over a day or two is too long!

c. Quick supply store (QSS). The OSS issues selected repair parts over the counter. The parts issued from the store are fast–moving, low–cost items. Your clerk need only present a want–slip or shopping list to obtain the required QSS parts. The want–slip may be destroyed upon completion of the issue action. Although your maintenance section need not account for QSS items (QSS items are not listed on your PLL), items should be requested only when needed and in the quantity required.It is permissible to keep a seven–day supply of QSS items on hand.



Another source of repair parts in some areas is the cannibalization point. The"*can–point*"has unserviceable end–items which may have some serviceable parts left on them. If they have a part you want, all you normally have to do is present a parts request and take the part off the equipment.

A good, solid working relationship with your supporting maintenance/DS unit is a MUST! Develop it and it will pay you significant readiness dividends!

3–3. LOGISTICS ASSISTANCE PROGRAMS (LAP)

The LAP provides technical and logistical assistance to unit and direct support levels of maintenance. Your point of contact is normally the Army Materiel Command (AMC) logistics assistance officer (LAO). The LAO can help you:

*. Track down the exact status of a critical requisition.

*. Find a critical part, module, or subassembly.

*. Resolve Systemic supply and maintenance problems.

*. Coordinate special training on new equipment.

*. Provide on–site training when needed.

*. Ensure total package fielding is done correctly.

*. Assist maintenance personnel in identifying and fixing peculiar equipment problems.

*. Serve as the link with the wholesale supplier in obtaining and expediting needed parts.

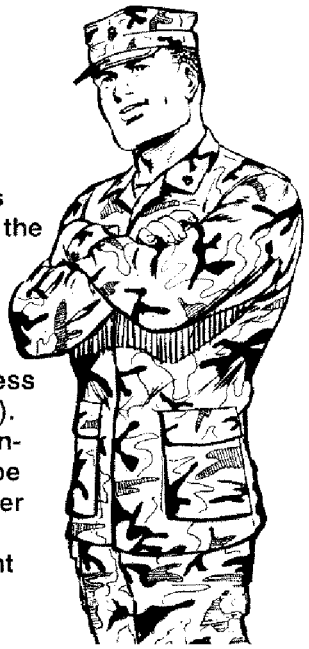
*. Look up your LAO for help in solving your really difficult problems.

3–4. MAINTENANCE ASSISTANCE AND INSTRUCTION TEAM(MAIT)

These teams assist and instruct units in improving maintenance operations and management. You must call the MAIT in your command to discuss your situation and coordinate their visit.Based on your specific needs, they tailor a team to assist and instruct your unit. Section 3, Chapter 4 of AR 750–1 details MAIT procedures.

Chapter 4
Preventive Maintenance (PM) Indicators.

The following indicators are samples of some of the more common maintenance problems on selected high density equipment collected by The Materiel Readiness Support Activity (MRSA). These indicators of maintenance problems can be easily spotted as a leader walks through the unit motor pool or equipment storage area.



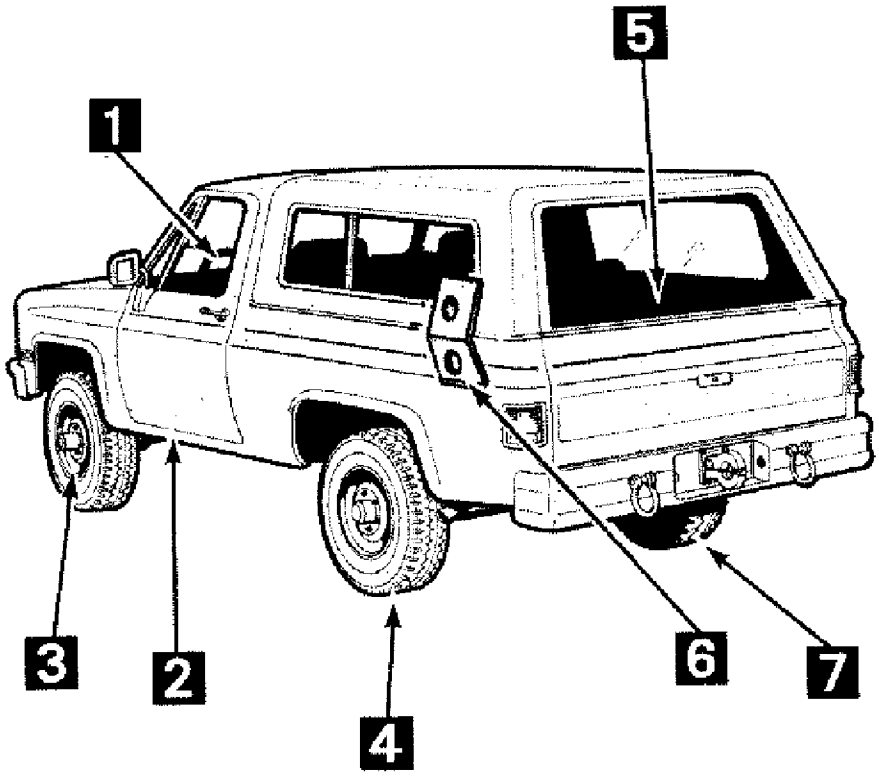
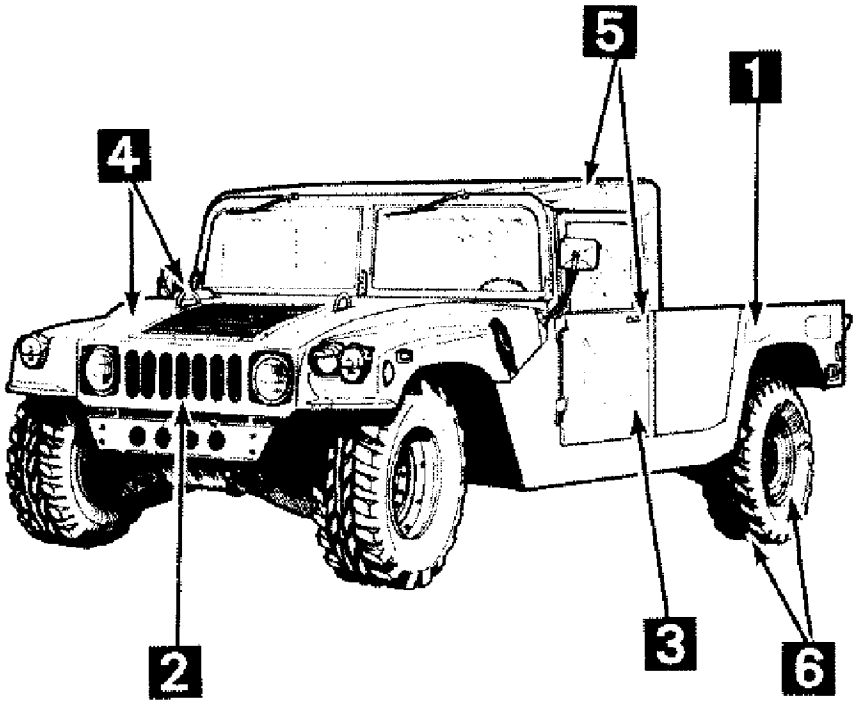


Table
CUCV M1001

1 –Seat belts or seat locks are missing or broken.
2 –Rust under floor mats.
3 –More than one lug nut missing.
4 –Tires cut, gouged, cracked, or unusually worn.
5 –Tailgate window will not operate properly.
6 –Body damage around antenna mount bracket.
7 –Tire air pressure extremely low.

Table
HMMWV M998 SERIES

1 –Fuel filler neck screen damaged or missing.
2 –Mud or dirt caked on radiator.
3 –Seat belts missing or will not operate properly.
4 –Cracks in hood or damaged hood hinges.
5 –Torn canvas or broken door handles.
6 –Tires cut, gouged, cracked, or worn past wear bar.
7 –PMCS, after–operation PMCS not performed on fuel filter.



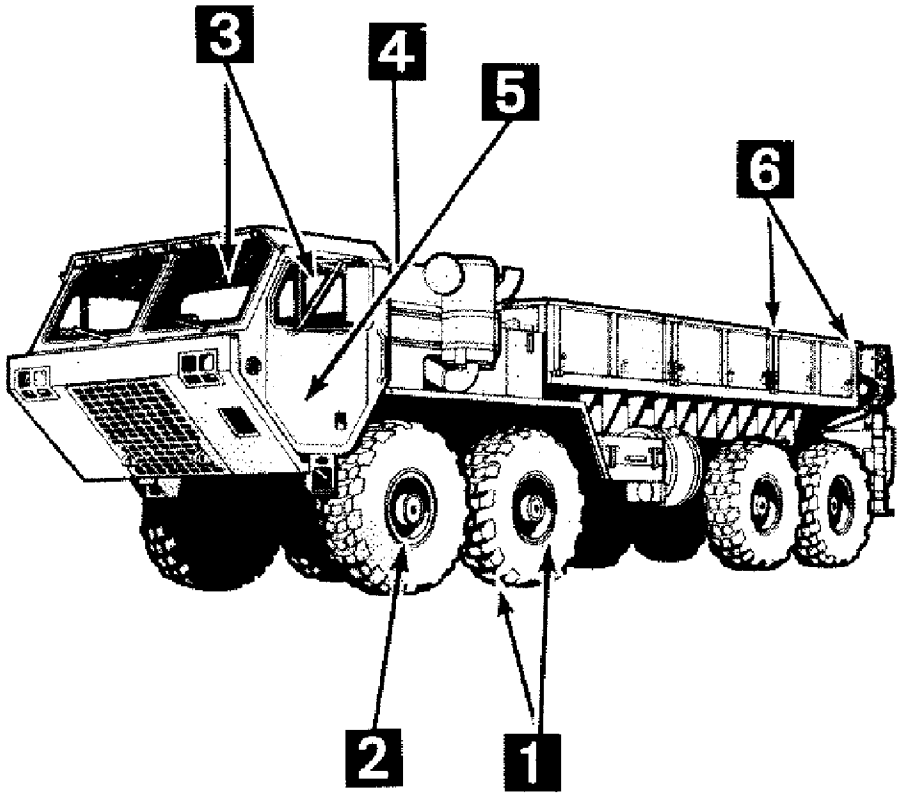
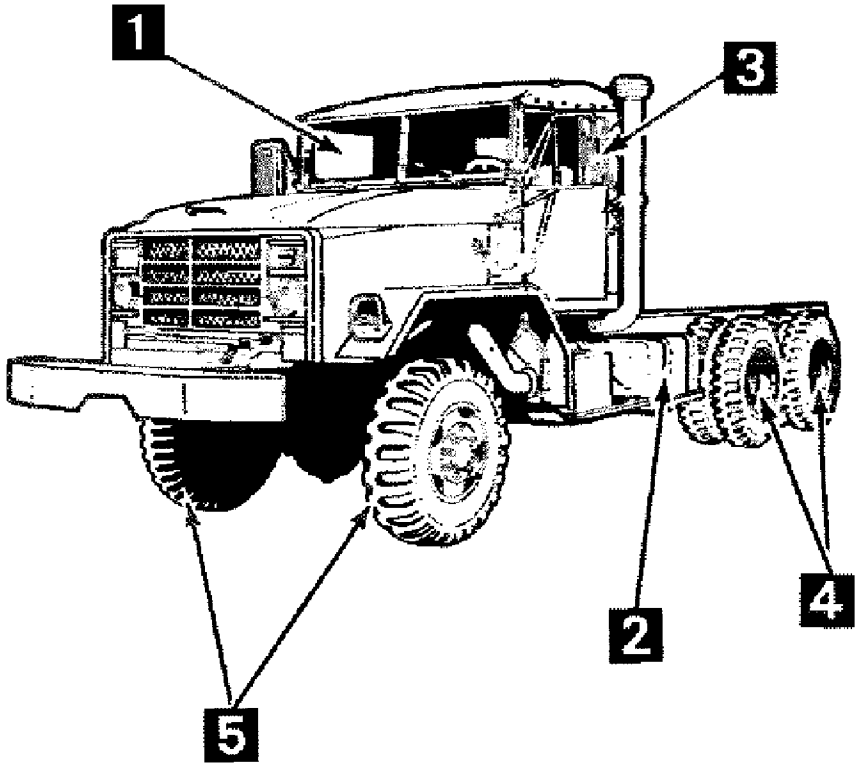


Table
HEMTT M977 SERIES

1 –Tires cut, gouged, cracked or valve stem cap missing.
2 –Any loose or missing lug nuts.
3 –Windshield/windows cracked, discolored, or missing.
4 –Spare tire hoist incomplete or bent.
5 –Fire extinguisher missing, damaged, or discharged.
6 –Any cargo body latches broken or lockpins missing.

Table
TRK CGO 5T M939

1 –Trash or debris in cab.
2 –Fuel tank filled above full line on tank.
3 –Side mirrors damaged or missing.
4 –Loose lug nuts or more than one missing.
5 –Tires cut, gouged, cracked or excessively worn.
6 –Evidence of Class III leaks under vehicle.



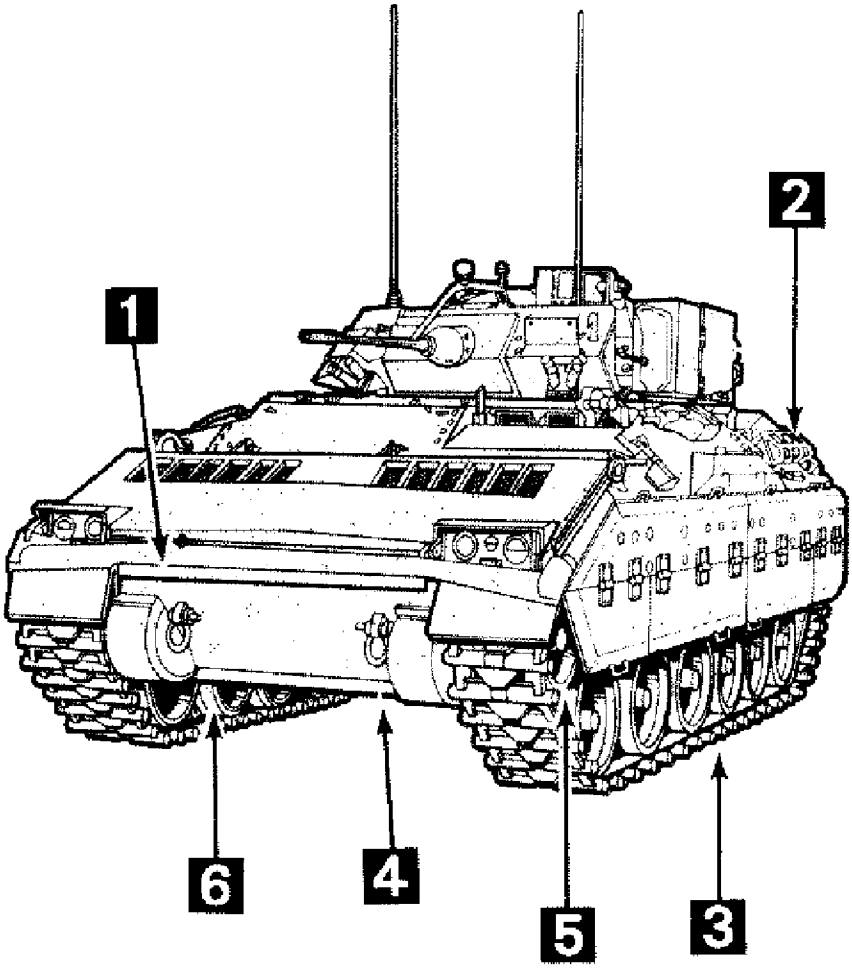
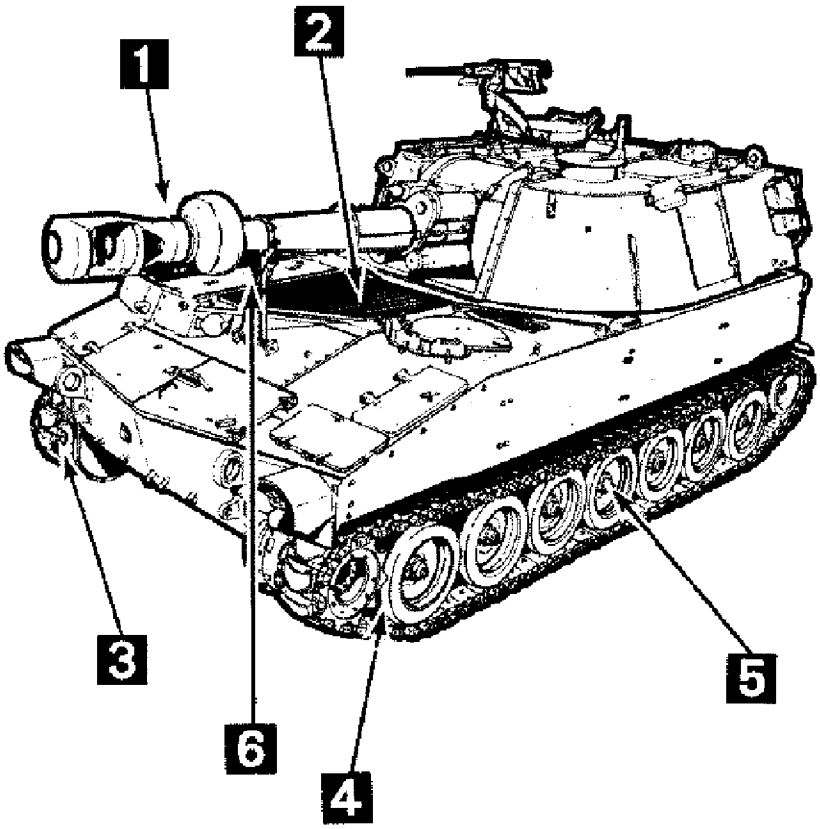


Table
BRADLEY M2/3

1 –Water barrier/erection system incomplete or damaged.
2 –External fire suppression handle wire or seal broken.
3 –Oil not visible in: road wheel, idler wheel, or support roller hubs.
4 –Hull drain plugs missing.
5 –Drive sprocket worn to wear indicator.
6 –Rubber chunking across 1/2 the width of road wheel.

Table
M109 SERIES HOWITZER

1 –Muzzle brake key is missing.
2 –Air cleaner doors will not open or close properly.
3 –Any end–connector, wedge, or bolt missing.
4 –Rubber chunking across 1/2 the width of road wheel.
5 –Oil not visible in road wheel hub sight glass.
6 –Travel lock will not secure gun tube in place.



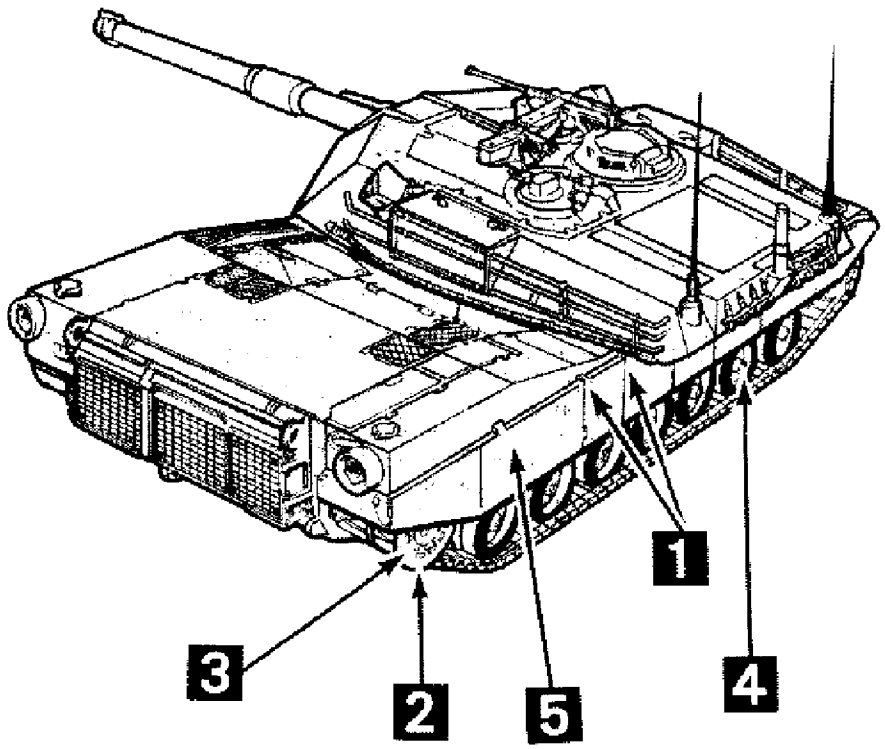
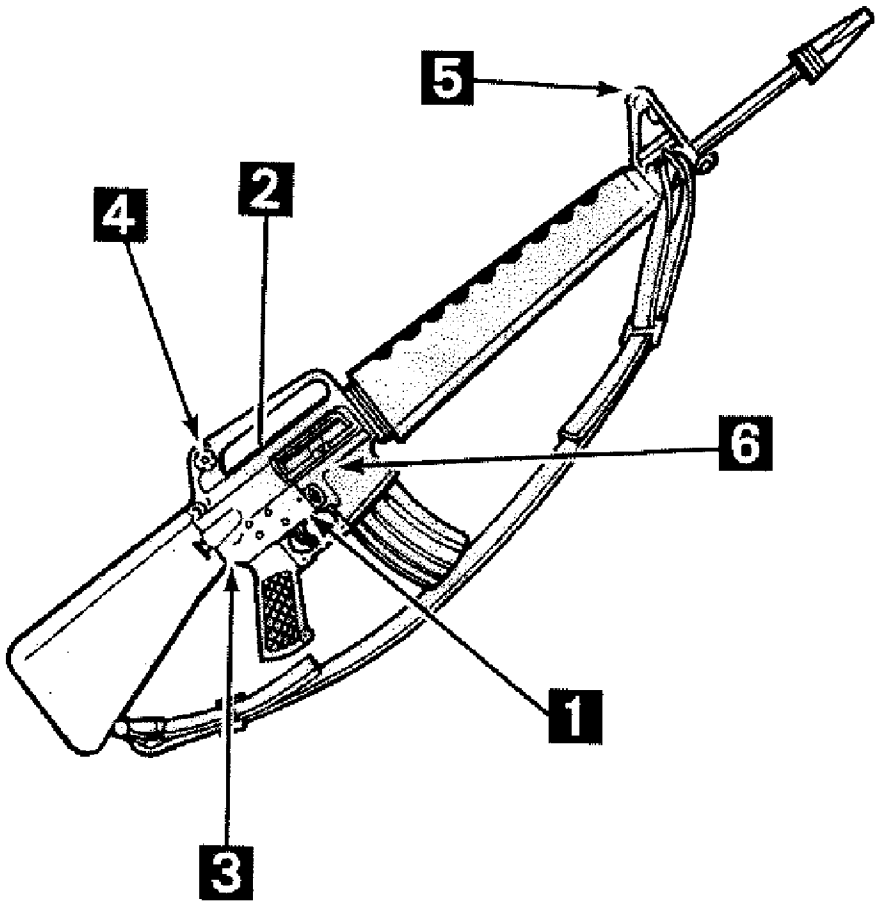


Table
M1 SERIES TANK

1 –Any ballistic skirt hinges broken or missing.
2 –Drive sprockets worn to wear marks.
3 –Broken or loose sprocket mounting bolts.
4 –Oil level below plug hole on road wheel hubs.
5 –End connector to skirt gap less than 1/8 inch.
6 –Evidence of Class III leaks under vehicle.

Table
RIFLE M16

1 –Bolt catch will not hold bolt carrier open.
2 –Selector lever stuck.
3 –Takedown pin frozen.
4 –Rear sight ears bent, windage drum damaged.
5 –Front sight bent, loose, or detent stuck.
6 –Ejection port cover will not close or lock.



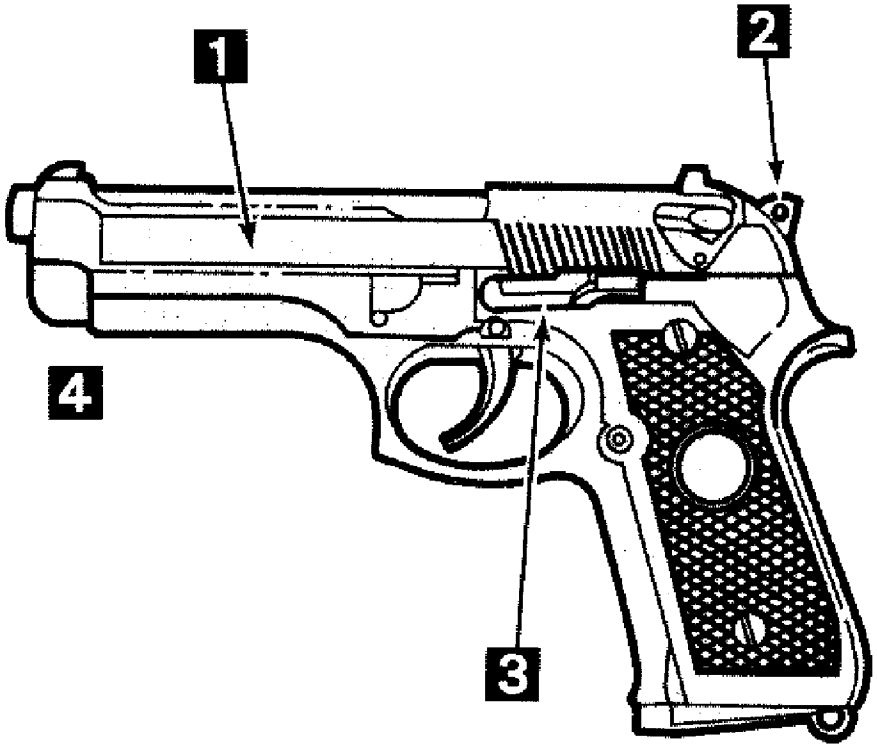
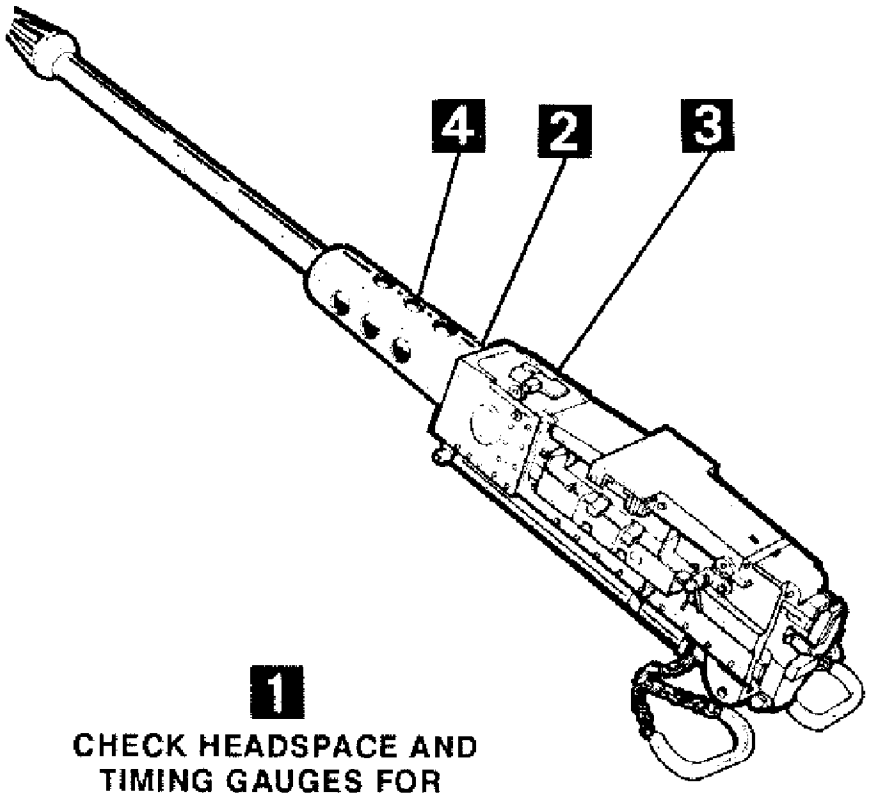


Table
PISTOL M9

1 –Slide stop will not lock slide to the rear.
2 –Hammer moves when fired with safety in safe position.
3 –Magazine catch will not lock or release.
4 –Obviously damaged or missing components.

Table
MACHINE GUN, M85

1 –Headspace and timing gauges bent, damaged, or missing.
2 –Barrel locking spring is weak.
3 –Retracting handle nuts loose, cotter pins missing.
4 –Barrel threads damaged or barrel will not lock.



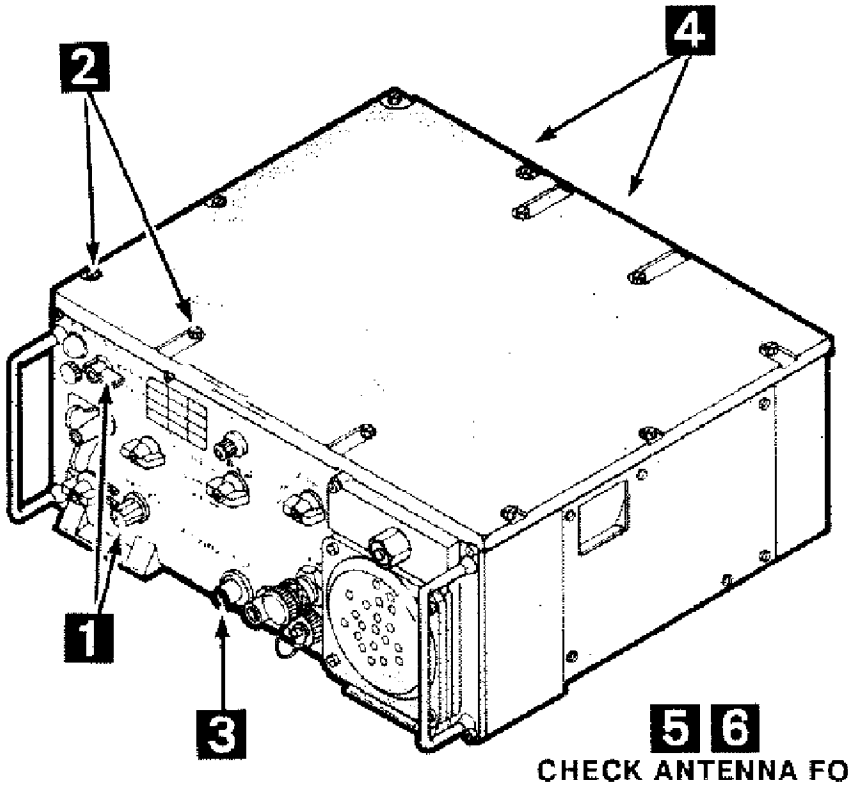
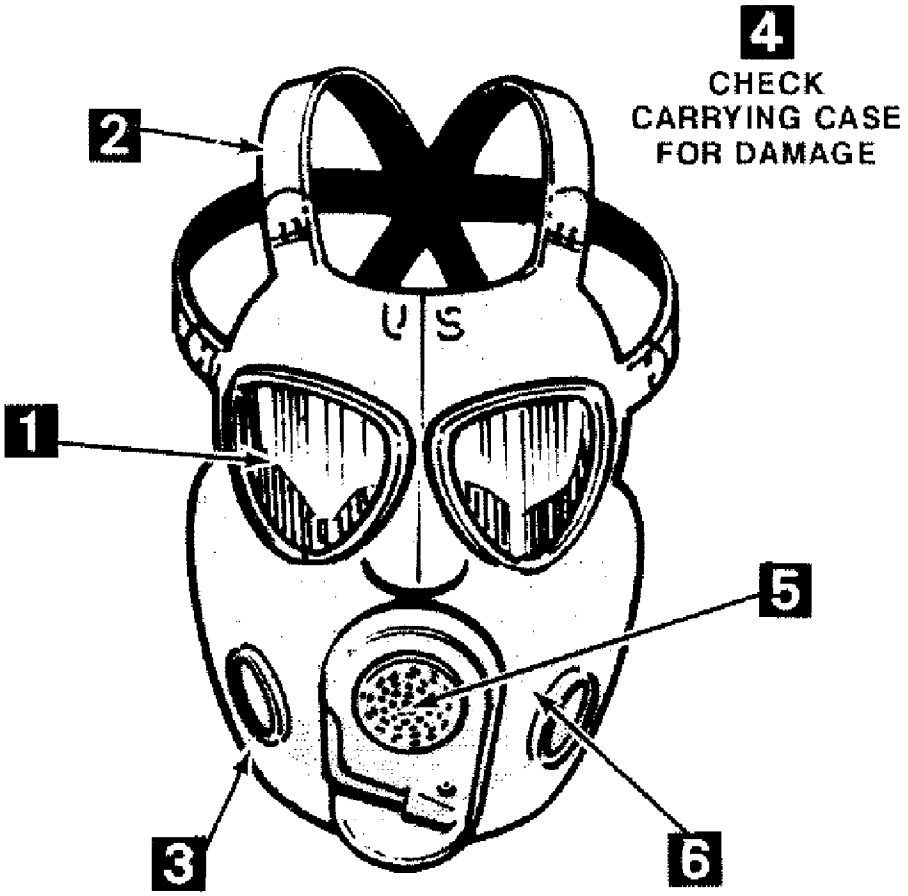


Table
AN/VRC 12 SERIES

1 –Any knobs, switches, or connectors broken or missing.
2 –Any panel screws loose or missing.
3 –Rubber dumbbell caps missing.
4 –Any RT heat exchanger vanes dirty.
5 –Antenna or control cables loose or damaged.
6 –Antenna tip missing.

Table
MASK M25/M43

1 –Lenses damaged, cracked, or discolored.
2 –Head harness has no elasticity, is cut or torn.
3 –Inlet valve cap missing or dirty.
4 –Pouch flap button holes torn, not fastened.
5 –Nose–cup valve disks not in place or stuck.
6 –Filter elements wet or visibly damaged.



Appendix A
MAINTENANCE CHECKLISTS

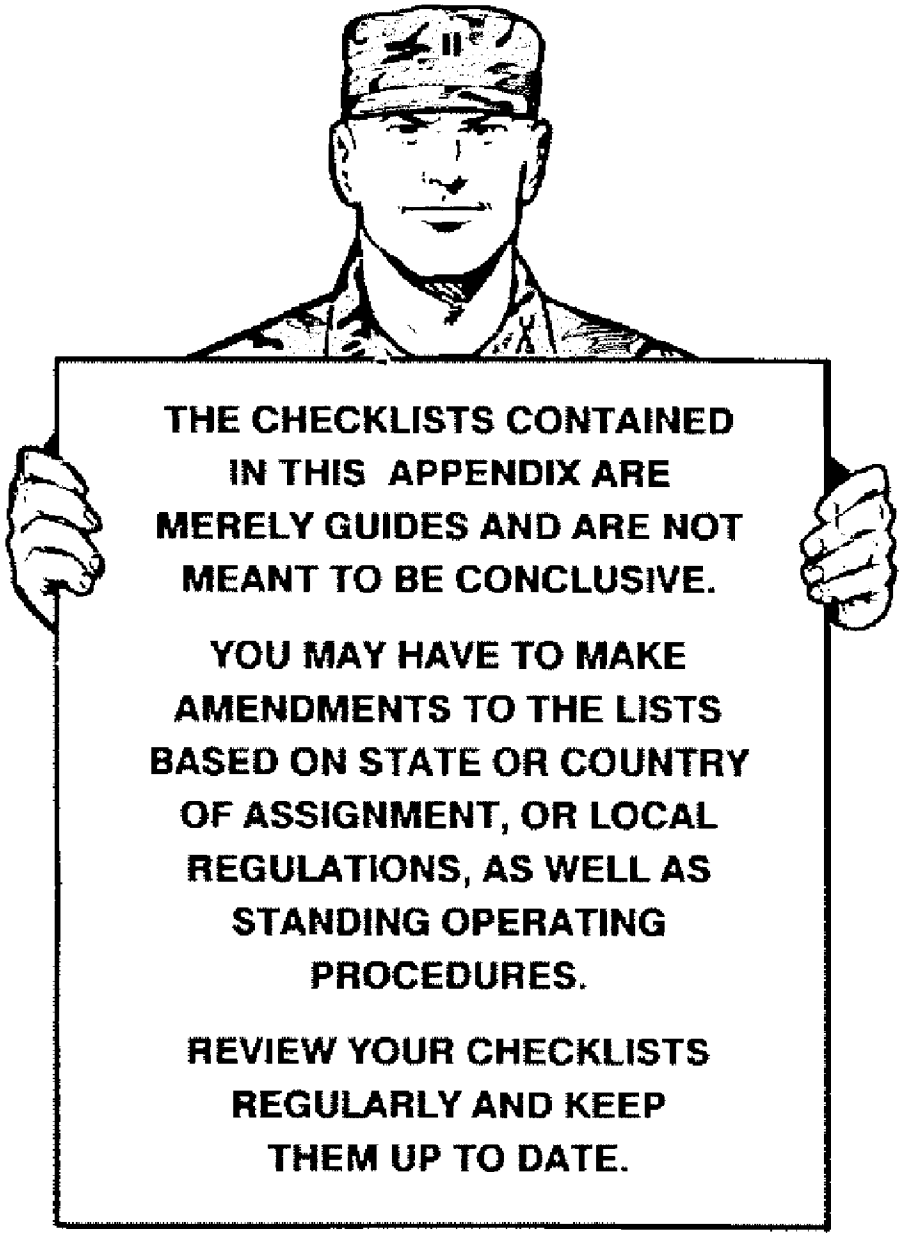


Table
MASTER LISTING OF CHECKLISTS FOUND IN APPENDIX A

Table
MASTER LISTING OF CHECKLISTS FOUND IN APPENDIX A—Continued

CHECKLIST A. DRIVER/OPERATOR RECORDS

1. GENERAL. All assigned operators and assistant operators will be properly licensed and recorded by running ULLS (Operator Qualification, DA Form 348). Commanders must ensure that soldiers are selected, tested, and licensed IAW appropriate technical manuals and technical bulletins for each type of equipment they operate.

2. TASK, CONDITIONS, STANDARD.

(a) *TASK.* To properly license unit members and maintain accurate records.

(b) *CONDITIONS.* Units must ensure that qualified operators are available to operate assigned equipment in garrison and field environments.

(c) *STANDARD.* Drivers/operators are licensed for assigned equipment IAW AR 600–55; and required records are maintained IAW ULLS–II.

3. CHECKLIST.

(*) The operator's equipment qualification as listed on OF 346 match Operator Qualification Record (DA Form 348), (AR 600–55, para 5–2e).

(*) Formal operator training is annotated in Section III, DA Form 348 for the vehicle(s) or equipment he is authorized to operate(AR 600–55, para 1–5g (2) FM 55–30, Chapter 9).

(*) Prescribed critical task testing is given yearly for all equipment listed on OF 346 and recorded on the Operator Qualification Record (DA Form 348), (AR 600–55, para 1–5g (2)).

(*) The Operator Qualification Records (DA Form 348) are reviewed and updated annually to determine a driver's/operator's eligibility for awards, expiration of permits, and training requirements (AR 600–55, para 1–5i (1)).

CHECKLIST B. TEST, MEASUREMENT, AND DIAGNOSTIC EQUIPMENT (TMDE) CALIBRATION

1. GENERAL. Equipment will be accounted for and secured. TMDE, will be calibrated IAW TB 43–180 and AR 750–43. Replacement for lost, damaged, or destroyed TMDE will be IAW AR 735–5. Units will have all TMDE hand–receipted down to user level.

2. TASK, CONDITIONS, AND STANDARD.

(a) *TASK.* Validate accountability, serviceability, and calibration of TMDE.

(b) *CONDITIONS.*

(1) Unit must accomplish calibration of all equipment in a garrison and field environment. (Inspectors should be familiar with references listed above IAW TB 43–180 and TB 750–25.)

(2) Equipment selection will be on a random–sample basis. The number of items inspected will be determined by the lot size and the amount of time available for the inspection.

(c) *STANDARD.* Have all unit calibrations completed, plus or minus 5 percent, within the designated time frame.

3. CHECKLIST.

(*) Has the unit submitted changes to current authorization document(s) for equipment no longer adequate to perform unit's mission?

(*) Are instruments on hand which are in excess of current or known requirements?

(*) Is a DA Form 3758, Calibration and Repair Requirements Worksheet, completed and submitted for each item for TMDE requiring calibration that is not listed in TB 43–180, IAW TB 750–25?

(*) Do all items of TMDE submitted for calibration, comply with the maintenance company, TMDE external standing operating procedure(SOP 750–2)?

(*) Has all TMDE on hand, including RADIAC been reviewed to determine calibration requirements IAW TB 43–180?

(*) Is critical TMDE identified as such to supporting unit?

(*) Is the supporting unit responsive to supporting unit?

(*) Has the calibration coordinator been to the briefing given monthly by the support team?

(*) Is the monthly master listing picked up, reviewed for accuracy, corrections made, and returned to the TMDE support TEAM for update?

(*) Have DA Form 1687 (Notice of Delegation of Authority–Receipt for Supplies), assumption of command orders or property book officer appointment orders, and the TMDE support coordinator appointment orders been submitted to the TMDE support team?

(*) Has all TMDE been properly identified and appropriate label affixed?

(-) DA Label 80 (U.S. Army Calibrated Instrument)?

(-) DA Label 163 (U.S. Army Limited or Special Calibration)?

(-) CNR (calibration not required)?

(-) CBU (calibrate before use)?

(*) Are TMDE problems elevated to the supporting activity and the command coordinator, and is follow–up action initiated, if required?

(*) Is DA Form 5504, Maintenance Request, filled out properly prior to turn–in for excess/coding IAW DA Pam 738–750?

(*) Are the following publications on hand: AR 750–43, TB 750–25, and TB 43–180?

(*) Is TMDE checked for damages before turning it in for repair/coding action?

(*) Is damage statement available with TMDE upon turn–in of TMDE for TI Excess/Coding?

(*) Are DA Form 2404/BII Statements filled out and signed by commander/property book officer (PBO)?

CHECKLIST C. PLL/CLASS IX PROCEDURES

1. GENERAL. Unit inspected will be checked for 100 percent accountability of authorized PLL. PLL will be on hand or on a valid

requisition for partial or zero balance and on proper priority.Commanders will monitor the rejection rate of request to meet or exceed the goal of 2–5 percent. Units will ensure their PLL/combat PLL can support the unit for the mission assigned.

2. TASK, CONDITIONS, AND STANDARD.

(a) *TASK.* To properly requisition, store, and account for Class IX items.

(b) *CONDITIONS.* Unit must accomplish responsible repair parts management in a garrison and field environment.

(c) *STANDARD.* PLL zero balance lines must not exceed 10 percent of total authorized lines. Bin storage of PLL items must be 100 percent accurate.

3. CHECKLIST.

(*) Print an Excess Management Report. Does the unit have established SOP guidelines for the turn–in of excess parts IAW DA Pam 710–2–1?

(*) Requisition process. (ULLS users manual, DA Pam 710–2–1, and Division Support Command

(-) Check fault record against the document control register to ensure parts required are on order.

-. Print fault records for five to eight vehicles.

-. Print document register by admin number for vehicles selected.

(-) Unit has current AMDF on hand.

(-) Unit verifies/researches National Item Identification Number (NIIN) not in ULLS–II catalog.

(-) The current unit transaction listing isproperly initialed and filed by the unit for 30 days. (Run "Send unit transactions to SOS.")

(-) Does unit post status to ULLS systems using the status diskette and/or hard copy to verify exception status?

(-) Unit runs document control register (DCR) purge process once a month to remove complete document from the DCR.

(-) The DCR purge diskette is properly labeled with disposition instructions and then filed for two years, IAW ULLS End Users Manual.

(*) Unserviceable items are turned in expeditiously. Unit uses the recoverable item control list (unmatched list) to reconcile transactions.

(*) Unit receives and works the bimonthly reconciliation, and has last recon lists on hand.

(*) PLL inventory procedures. Check PLL inventory against unit PLL for actual quantity and location of items.

(-) Print units PLL inventory

(-) Select 15–20 items to be inventoried.

(*) Print zero balance report. Unit does not exceed 10 percent of total authorized lines.

CHECKLIST D. POWER GENERATION EQUIPMENT

1. GENERAL. Use AR 385–55 for safety and AR 600–55 for generator licensing procedures. TB 600–1 provides guidance for licensing and testing ground support equipment operators (generators).

2. TASK, CONDITIONS, AND STANDARD.

(a) *TASK.* To ensure power generation equipment maintenance is being performed.

(b) *CONDITION.* Equipment will be placed in operation at a safe, convenient location. A technical inspection will be performed on 10 percent of the equipment (at least one piece per type will be inspected) per company–sized unit. Power units will have only the generators inspected. All generators must be properly grounded, and the operator must perform a PMCS before the inspection.

(c) *STANDARD.* Achieve a 90–percent operational ready–rate for randomly selected equipment.

(*) The operator is properly licensed to operate the power generation equipment (AR 600–55)

(*) Proper safety equipment is on hand prior to operation of equipment (fire extinguisher, axe, shovel, mattock, and ground rod slide hammer) (TM –10 Series).

(*) BII are on hand and serviceable (fuel can adapter, canvas cover, fire extinguisher, and grounding rods) (TM –10 series).

(*) Appropriate TMs with changes are on hand and complete (12 series and DA Pam 25–30).

(*) Terminals are complete with binding posts clamps.

(*) The equipment is on a proper dispatch (trailer–mounted equipment dispatched with prime mover).

(*) Required services are performed IAW the appropriate lube order/TM–20. (Run Process M–60 and review the scheduled maintenance records)

(*) Selected power generators will be started to ensure engine operability.

(*) All power generator TM–10 faults are identified, corrected, or recorded using ULLS Process M–15.

CHECKLIST E. COMMUNICATION EQUIPMENT

1. GENERAL. Inspection is conducted to ensure the equipment is complete and that required unit maintenance has been performed IAW appropriate TM–10 and this checklist.

2. TASK, CONDITIONS, AND STANDARD.

(a) *TASK.* To validate the performance of unit maintenance communication equipment .

(b) *CONDITIONS.* Vehicular–mounted equipment will be placed in operational configuration on assigned vehicles. All other communications equipment will be displayed in their designated area (communications storage room, platoon TO&E rooms, CONEXs, and so forth). A technical inspection will be performed on 10 percent of vehicular–mounted equipment and 10 percent of all other equipment will be inspected, or at least one piece per type.

(c) *STANDARD.* Maintain communications maintenance records IAW DA Pam 738–750 and applicable TM–10.

3. CHECKLIST.

(*) All vehicular–mounted equipment is installed in operational configuration (TM–10 series).

(*) All vehicular–mounted intercom systems, including combat vechicle crewmen (CVC) helmets, are operational and have a current PMCS (TM–10 Series).

(*) All FM radio vehicular–mounted equipment is grounded, operational, and has a current PMCS (TM–10 Series).

(*) All vehicular–mounted antennas have antenna top caps installed and are positioned not less than several feet above the ground when tie–down clip is fastened.

(*) Shelters mounted on vehicles must be blocked and braced, have tie–down cables secured, and be placed on dunnage, and grounding material must be present and being used when operational.

(*) Radio teletypewriter (RATT)/Communication Center equipment is operational in the secure mode using the KW–26 secure device(TM–10).

(*) Multichannel equipment is operational in the secure mode using the KW–7 secure device (TM–10).

(*) Switchboard equipment is operational with 90 percent of line capability available (TM–10).

(*) Telephone/remotes are operational and all batteries are removed to prevent storage damage (TM–10).

(*) Antennas have all required parts on hand and are correctly maintained (TM–10).

(*) Wire/cable is serviced and line tested (TC 24–20).

(*) Unit equipment identified as inoperative is evacuated to support maintenance within 24–72 hours (Division Maintenance SOP).

(*) ULL users. IAW ULLS end–user manual: Run Process with Preventive maintenance checks and services and Record along with Process Maintenance Faults/Parts Installed. (The running of these processes should reflect the true status of equipment and parts on order).

CHECKLIST F. SMALL ARMS

1. GENERAL. The Unit Commander and managers must develop

a program that unifies the efforts of armorers, operators, and maintenance personnel. PMCS are the foundation of the Army maintenance system.Unit commanders should use the checklist as a primary management tool.

2. TASK, CONDITIONS, AND STANDARD.

(a) *TASK.* To validate small arms serviceability, maintenance, and safety.

(b) *CONDITIONS.* In a garrison or field environment and IAW appropriate TMs and regulations, a –10/–20 level technical inspection will be performed on a minimum of 20 percent of small arms per company–sized unit.

(c) *STANDARD.* The technical inspection will be performed IAW the appropriate 10/20 level manuals and this checklist to assess the serviceability and safety of each weapon inspected. To attain a rating of GO for this circular, the unit must:

(1) Attain a 90–percent fully mission capable (FMC) weapon status (Item 4).

(2) Attain at least a 90–percent GO rating on the remaining items in this checklist.

3. CHECKLIST.

(*) PMCS is being performed IAW TM –10 and a DA Form 2404 is on hand for each assigned weapon.

(*) Number of weapons serviceable/number of weapons inspected .(90 percent of inspected weapons are fully mission capable.)

(*) A cleaning kit is on hand for each weapon, to include rags, cleaner, lubricant authorized by weapon TM, swabs, and pipe cleaners.

(*) All inspected weapons are properly assembled (appropriate TM).

(*) The required BII are on hand or on valid requisition for all weapons (appropriate TM).

(*) All TMs and changes are on hand (DA Pam 25–30).

(*) All fixed headspace machine gun barrels are matched with receiver and each barrel is tagged with its receiver serial number(TM 9–1005–224).

(*) Scheduled services which include functions tests are performed and proper annotations are recorded on DD Form 314:Quarterly (all weapons), Annual–DS (M16–series rifles, M231 firing port weapon, and M4 carbine, M203, M60, M2, M1911A1) (DA Pam 738–750).

(*) Weapons with NMC faults (beyond the –20 level of maintenance) annotated on DA form 2404 are being evacuated to the DSU within 24 hours of being identified.

(*) All DA Forms 5504 are being maintained (DA Pam 738–750).

(*) Armorer's tool box is complete and hand– receipted for on DA Form 2062, Hand Receipt–Annex Number.

(*) Weapon exterior finish meets TM requirements for combat/training usage.

(*) Has your unit armorer been school trained?

CHECKLIST G. WEAPONS SYSTEMS

1. GENERAL. Services must be performed in strict accordance with the applicable –10 series TM.

2. TASK, CONDITIONS, AND STANDARD.

(a) *TASK.* To validate weapon systems, PMCS, and operational ready rates of weapon systems.

(b) *CONDITIONS.* Technical inspection will be performed in a garrison or field environment IAW appropriate TMs and regulations.

(c) *STANDARD.* An operational ready rate of at least 90 percent must be achieved for a randomly selected 10–percent (minimum) sample–size of authorized armaments.

3. CHECKLIST.

(*) The following services are performed and recorded on the appropriate DA Form 2408–4, Weapon Record Data (DA Pam 738–750).

(-) Recoil exercise for nonfiring systems (M1, M60, and M109).

(-) Borescope (M1, M60, M109, and M30).

(-) Pullover gauge (M1, M60, and M30).

(*) Missile guidance verification entries are recorded on DA Form 2409, Equipment Maintenance Log, and the system is tagged (DA Pam 738–750, para 5–8) (Tow and Dragon – every 180 days).

(*) Entries on DA Form 2408–4, Blocks 10a through 10j, are completed only by the commander, section/crew chief, DS/GS personnel, and the commander's representative (designated in writing) (DA Pam 738–750).

CHECKLIST H. VEHICLE PREVENTIVE MAINTENANCE CHECKS AND SERVICES

1. GENERAL. A technical inspection will be performed on at least 10 percent of the vehicles (at least one vehicle per type will be inspected) per company– sized unit. Trailer will be properly connected to the prime mover and inspected with the vehicle. BII will be inspected concurrently. Before inspection of vehicles, operators will conduct a before–operation PMCS using the appropriate TM–10. Vehicles are subject to being dispatched and road–marched-.Vehicles will return to the motor pool and operators will perform an after–operation PMCS with all faults properly entered on the DA Form 2404. Completed operator PMCS (DA Form 2404) will be made available for the inspector's review before inspection of vehicles.

2. TASK, CONDITIONS, AND STANDARD.

(a) *TASK.* To validate vehicle operator/unit maintenance performance.

(b) *CONDITIONS.* Units must perform required maintenance management in a garrison environment IAW appropriate regulations and TMs.

(c) *STANDARD.* Operator identifies, corrects, or records operator level faults. To achieve a rating of GO, the unit must:

(1) Attain a 90–percent or better FMC status for randomly selected equipment.

(2) Attain at least a 90–percent GO–rating on the remaining areas.

3. CHECKLIST.

(*) Operator is trained and licensed for equipment he has on dispatch (AR 600–55).

(*) Operator has correctly identified, corrected, or recorded faults on DA Form 2404 (TM –10 series and DA Pam 738–750).

(*) NMC faults noted by the operator are corrected before dispatch. (DA Pam 738–750)

(*) Number of vehicles NMC /number of vehicles inspected-.Ninety percent of inspected vehicles are fully mission capable.

(*) Uncorrected faults are recorded on Form 2404. (Print a Form 2404 for vehicles using Process M010

(*) Vehicle canvas is complete and installed properly IAW the appropriate operator TM and unit SOP. Unmounted canvas is accounted for by recording place of storage.

(*) Vehicle markings to include safety illuminating tape are visible and IAW local MSOP and AR 55–29 before dispatch.

(*) Required BII are being maintained in a clean and serviceable condition.

(*) Required BII on hand or an valid requisition.

(*) BII hand–receipted to the user level.

(*) BII secured when not in use.

(*) PMCS for communications and electronics equipment mounted on vehicles is concurrently accomplished with vehicle PMCS (TM –10 series).

(*) All current and updated manuals are on hand or on order for unit's equipment (12 Series and DA Pam 25–30).

(*) First–line supervisor and maintenance NCO are present during PMCS (DA Pam 735–35).

CHECKLIST I. DISPATCH PROCEDURES

1. GENERAL. This section tells how to make out and use forms

for equipment operations, dispatch and control, the forms and records that will be kept by the unit, and proper disposition of the records. Unit commanders should use the checklist as a primary management tool in their command inspection program.

2. TASK, CONDITIONS, AND STANDARD.

(a) *TASK.* Validate dispatch procedures.

(b) *CONDITIONS.* Units accomplish responsible equipment dispatch procedures in a garrison or field environment IAW DA Pam 738–750.

(c) *STANDARD.* Dispatcher completes the dispatch loop without error.

3. CHECKLIST.

(*) The commander appoints the dispatcher on orders (DA Pam 738–750, Chapter 2).

(*) The unit has an equipment folder for each specific item of equipment (DA Pam 738–750, Chapter 2).

(*) The dispatcher ensures the Equipment Dispatch has complete information in all required blocks and columns before and upon return from dispatch.

(*) The unit is maintaining the Equipment Control Record (Print Equipment Control Record).

(*) Equipment was sent to support maintenance with maintenance request and logged–out on Equipment Control Record.

(*) The unit is complying with the disposition instructions of the Equipment Control Record IAW ULLS user's manual.

(*) The dispatcher is following ULLS II dispatch procedures.

(*) The equipment maintenance work sheet and fault record are printed and placed in equipment folder as part of dispatch process.

(*) Dispatcher signs automated dispatch form.

(*) Dispatcher is aware of and following the current command policy memorandum for vehicle dispatch.

CHECKLIST J. ARMY OIL ANALYSIS PROGRAM (AOAP)

1. GENERAL. Oil analysis is used as a diagnostic tool to determine the physical condition of used oil and the internal condition of engines, transmissions, hydraulic systems, and other fluid–wetted components. Unit commanders should use the checklist as a primary management tool in command inspection programs.

2. TASK, CONDITIONS, AND STANDARD.

(a) *TASK.* Validate oil analysis procedures.

(b) *CONDITIONS.* Units must accomplish responsible oil analysis management in garrison and field environments.

(c) *STANDARD.*

(1) Samples are taken within 10 hours (plus or minus) of scheduled sampling time and forwarded to the AOAP laboratory.

(2) The AOAP laboratory recommendations via DA Form 3254–R are actioned within TWO working days.

3. CHECKLIST.

(*) Samples are taken on all equipment in the program as scheduled (DA Pam 738–750).

(*) Required sampling supplies are on hand (DA Pam 738–750).

(*) Is the oil analysis request data posted?

(*) There is an AOAP monitor appointed on orders by the commander and a certificate of qualification is on hand.

(*) Sampling valves are installed on all vehicles that have installation instructions published.

(*) Lab recommendations are being implemented correctly and within the prescribed time frame (AR 750–1).

(*) Operators and supervisors have received training or orientation on AOAP and the training is authenticated. (See OF 346 and Operator Qualification Record or recent printout under ULLS.)

(*) The most recent monthly printouts (Oil Analysis Requests)are on file, to include the three previous printouts and authentication.

(*) Corrective action taken when notified of resample and/or other action via DA Form 3254–R and Oil Analysis Request.

(*) Safety equipment is available and used when oil samples are taken.

(*) Samples are taken on combat vehicle final drives every six months.

CHECKLIST K. ULLS REPORTS AND DISPOSITION

1. GENERAL. Inspection is conducted to ensure that the user and manager of the unit level logistics system can produce the daily and monthly reports that the commander needs to run effective maintenance management programs at unit level.

2. TASK, CONDITIONS, AND STANDARD.

(a) *TASK.* To ensure the efficiency of the user and manager in the area of ULLS reports.

(b) *CONDITIONS.* In a garrison or field environment the user and manager will produce the required report IAW the ULLS manuals and regulations.

(c) *STANDARD.* Achieve a 90–percent effectiveness rate in the running and disposition of the ULLS reports.

3. REPORTS CHECKLIST.

(*) Demand Analysis Report: printed monthly; dispose of IAW ULLS users manual.

(*) PLL List: print and dispose of IAW ULLS users manual.

(*) PLL Inventory Report: print and dispose of IAW ULLS users manual.

(*) Document Control Register: purge monthly; hard copy or tape filed for two years.

(*) Commanders Exception Report: printed daily and filed for two years.

(*) Document Control Register: print and dispose of IAW ULLS users manual.

(*) Equipment Not Mission Capable Report: print and dispose of IAW ULLS users manual.

(*) Equipment Dispatch Control Log: print and dispose of IAW ULLS users manual.

(*) Equipment Dispatched Control: purge daily and hold for 30 days, except for vehicles involved in accidents, which you keep until released by the investigating officer.

CHECKLIST L. MAINTENANCE OPERATION SAFETY CHECKLIST

1. GENERAL. Almost one out of every five on–duty injuries to Army personnel happen during maintenance. Most of these occur in wheeled or tracked vehicle facilities during installation, removal, or modification of equipment.

More maintenance accidents occur on tactical vehicles than on administrative vehicles.

More maintenance accidents happen during Organizational maintenance than during other levels of maintenance. Direct support and general support levels of maintenance have about half as many.Depot–level maintenance has the fewest.

Maintenance accidents and injuries usually get little attention and often little in the way of prevention because looked at individually, they often seem to be only isolated,"bad luck"events. But looked at collectively, they represent a serious loss to the Army.

2. TASK, CONDITIONS, STANDARD.

(a) *TASK.* To validate unit maintenance operations safety.

(b) *CONDITION.* In a garrison or field environment IAW appropriate TMs and regulations.

(c) *STANDARD.* Conduct unit maintenance operations and reduce human errors to become accident free.

3. GENERAL SAFETY CHECKLIST.

(*) Does the commander have a formal, written accident–prevention plan that is compatible with the mission and the function of the organization? Are personnel aware of and actively implementing it? (AR 385–10, AR 385–40, AR 385–55, DA Pam 385–1, FM 29–2)

(*) Does the unit have a current, complete, and clearly defined

safety SOP, and are safety meetings conducted on a regular basis?(AR 385–10, DA Pam 385–1)

(*) Is the unit commander personally involved in the unit accident prevention program, and are they personally reviewing the program efforts? (AR 385–10, DA Pam 385–1)

(*) Is there a designated safety officer? Are duties specified and are they accomplished? (AR 385–10, DA Pam 385–1)

4. MAINTENANCE WORK AREA CHECKLIST

(*) Does the shop foreman emphasize accident prevention measures in all maintenance operations? (AR 385–10)

(–) Are walkways properly marked? (AR 385–10, AR 385–30)

(-) Are safety and warning posters used throughout the maintenance areas? (AR 385–10, AR 385–30)

(-) Are smoking and no smoking areas designated and are no smoking signs posted? (AR 420–90)

(*) Are the maintenance facilities adequate? (TC 43–35)

(-) For field? (TC 43–35)

(-) For garrison? (TC 43–35)

(-) If not, has action been taken to improve them? (TC 43–35)

(*) Is there an adequate vehicle wash facility? Proper drainage? Oil separator? Are they adequately serviced? (TC 43–35)

(*) Are the shop bays and administrative areas neat and functional? (TC 43–35)

(-) Are shop sections organized to make maximum use of facilities? (TC 43–35)

(-) Are parking areas well organized and effectively used? (TC 43–35)

(-) Are adequate security measures taken to ensure against unlawful entry into the shop sections? (TC 43–35)

(*) Do sufficient electric power sources exist? (TC 43–35)

(*) Are lighting systems adequate? (TC 43–35)

(*) Is safety equipment (fire extinguishers, eye–wash baths, goggles, protective aprons, gloves, shields, and so forth) on hand and serviceable? (AR 385–10)

(*) Is equipment stored in an efficient manner?

(*) Is equipment stored to prevent damage? (AR 385–10)

(*) Is stored equipment clean and neat? (AR 385–10)

(*) Is installed materiel handling equipment (hoists, crane, and so forth) in working condition and maintained properly?(Appropriate TM, TB 43–0142)

(*) Have jacks, cranes, hoists, lifting cable/slings, and/or forklift trucks been load–tested as required? (TB 43–0142)

(*) Are jacks, cranes, hoists, lifting cable/slings, and/or fork lift trucks marked with capacity and next inspection due date as required? (TB 4–0142)

(*) Are shop/hangar floors being cleaned with low volatile and nonflammable liquids? (TC 43–35)

(-) Are drip pans used under vehicles in shops? (FM 43–5)

(-) Are approved cleaning materials handy in case of spills?(FM 43–5)

(*) Are oily rags stored in self–closing metal containers? (AR 420–90)

(*) Are unsealed containers of hydraulic fluid classified as contaminated and disposed of properly? (DA Pam 738–750)

(*) Do personnel using power tools, for example, drills, grinders, lathes, torches, and so forth, wear safety goggles and noise attenuating devices as required? (AR 385–10)

(*) Do mechanics remove jewelry when performing maintenance?(AR 385–10)

(*) Are tops of booths, shelves, and other surfaces in the paint shop cleaned to prevent the accumulation of lint? (AR 385–10, AR 420–90, FM 43–5)

(-) Are paint or petroleum deposits removed from the floor? (AR 385–10, AR 420–90, FM 43–5)

(-) Is paint and dope in the paint shop limited to quantities used during one work shift? (AR 385–10,AR 420–90, FM 43–5)

(-) Are fire extinguishers provided through–out the paint shop area? (AR 385–10, AR 420–90, FM 43–5) Are they the right type and serviceable?

(-) Is electrical equipment in the paint shop explosion–proof?(AR 385–10, AR 420–90)

(-) Are smoking restrictions posted and enforced? (AR 385–10, AR 420–90)

(-) Are covered waste containers used as required? (AR 385–30, AR 420–90)

(*) Are current LOs available and are they being used (for each specific model end–item)?

(-) Is the lubrication area used? Are sufficient lubrication materials available?

(-) Are lubricants protected to prevent contamination? (FM 43–5)

(-) Are both clean and dirty rag barrels clearly identified?Are they used? (AR 420–90, FM 43–5)

(*) Do maintenance personnel have sufficient tools to perform their level of maintenance? (TOE, TDA). (DA Pam 710–2–1)

(*) Is ground handling equipment properly reflectorized? (AR 385–30)

(*) Are ground support equipment operators (auxilary power unitAPU generator, and so forth) properly licensed? (AR 600–55)

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